TSD File Inventory Index

Date: May 1, 2001

Initial: CM Gonzales

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Facility Identification Number:	NJD 006 131 890		
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Note: Transmittal Letter to Be Included with Reports.
Comments:_____

STATE OF MICHIGAN

JOHN ENGLER, Governor

DEPARTMENT OF NATURAL RESOURCES

ROLAND HARMES, Director

Regional Headquarters
1990 U.S. 41 South
Marquette, Michigan 49855

December 27, 1993

Mr. Ronald Olson
Grede Foundries, Inc.
801 South Carpenter Ave.
Kingsford, Michigan 49801-5594

Dear Mr. Olson:

SUBJECT: TSD Inspection - MID 006 131 890

On December 21, 1993, staff of the Michigan Department of Natural Resources (MDNR) conducted an investigation of your facility located at 801 S. Carpenter Ave., Kingsford, Michigan, to evaluate compliance with the Michigan Hazardous Waste Management Act, 1979 P.A. 64, as amended, MCL 299.501 et seq (Act 64) and Subtitle C of the Federal Resource Conservation and Recovery Act of 1976 (RCRA), as amended, and any regulations promulgated pursuant to these Acts. The complete inspection forms are enclosed.

Based upon information obtained and observations made during the inspection, staff of MDNR have determined that your facility is in compliance (except for problems noted on the inspection forms) with the requirements of Act 64 and Subtitle C of RCRA, which are addressed by the enclosed inspection forms.

Enclosed, for your information, is a handout explaining the Pollution Incident Prevention Plan required for certain facilities in the State of Michigan under the Michigan Water Resources Commission, 1929 PA 245, and a short information sheet on waste minimization.

If you have any questions, please feel free to contact me at the number below.

Sincerely,

Leonard Switzer
Engineer
Waste Management Division
906/228-6561

ksf

ENCS

c: U.S. EPA

... INSPECTION REPORT

I.D. Number (U.S. EPA or Michigan) MID 006 131 890

FACILITY NAME Gredo Foundry Inc Iron

Mailing Address 801 South Carpenter Ave

Kingsford MI Michigan 49801-5594

City Zip Code

DATE 12-20-93 TIME (from) 10:00 (to) 12:30

PERSON(S) INTERVIEWED	TITLE	TELEPHONE #
Ron Olsen	Env Eng-	906-774 7250

INSPECTOR(S)	AGENCY	TELEPHONE #
Hank Switzer	MDNR-WMD	906-228-6561

Primary Business of this Facility: Foundry

Do you discharge a process wastewater to the local POTW, that would otherwise be a RCRA regulated hazardous waste? ___ yes ✓ no

Is the facility subject to the air emission standards for process vents managing hazardous waste with organic concentrations of at least 10 ppmw ? If yes, circle the type of operation(s): distillation, fractionation, thin-film evaporation, solvent extraction or air or steam stripping.

Reason for Inspection:

✓ Routine ______ Follow-up ______ Complaint

(09/03/91)

Gall - Sag. & Talk with Gene a Ernest

Act 64/RCRA Inspection Report

ed upon the inspection, this facility: FORM

_____ does not generate any hazardous waste

_____ conditionally exempt small quantity generator E

✓ small quantity generator inspection form - - - - - - - - -A

_____ generator inspection form B
_____ generator tank(s) system inspection form - - - - - - - - -B1

_____ transporter inspection form C

✓ boilers and industrial furnaces - used as Burner - J

PERMITTED TSDF
_____ treatment/storage/disposal facility (Subpart A-E & I) - - - - -D
_____ generator appendix inspection form D1
_____ TSDF tank system inspection form (Subpart J) - - - - - - - - D2
_____ surface impoundments inspection form (Subpart K) D3
_____ waste piles inspection form (Subpart L) - - - - - - - - -D4
_____ land treatment inspection form (Subpart M) D5
_____ landfill inspection form (Subpart N) - - - - - - - - - -D6
_____ incineration inspection form (Subpart O) D7
_____ miscellaneous units inspection form (Subpart X) - - - - - -D8

INTERIM STATUS TSDF
✓ treatment/storage/disposal facility (Subpart A-E & I) - - - - -D9
_____ generator appendix inspection form D1
_____ groundwater monitoring (Subpart F) use w/ Subparts K,L,M&N D10
_____ TSDF tank system inspection form (Subpart J) - - - - - - - - D2
_____ surface impoundments inspection form (Subpart K) D11
_____ waste piles inspection form (Subpart L) - - - - - - - - -D12
_____ land treatment inspection form (Subpart M) D13
_____ landfills inspection form (Subpart N)- - - - - - - - - - -D14
_____ incineration & thermal treatment inspection form (Subpart O&P) D15
_____ chemical, physical & biological treatment form (Subpart Q) - - -D16

COMMENTS: _____

INTERIM TREATMENT/STORAGE/DISPOSAL FACILITY
INSPECTION FORM

Facility's Name Gredle Foundry Inc

INSPECTION FORM D9
Part 6 Rules
P.A. 64 of 1979

Date 12-20-93 I.D. # MID 006 131 690

This facility, in addition being a treatment, storage &/or disposal facility:
✓ Generates Hazardous Waste (also use Form D1 # 7)
___ Transports Hazardous Waste (also use Form C)

This facility:
___ Accepts waste from off-site sources
1 Handles only its own waste

If applicable, hazardous waste is stored in:
___ Container(s) (drums, totes, roll-off boxes, etc) Approx. # of unit
___ Tank(s) (also use Form D2)
___ Waste pile(s) (also use Form D12)
___ Surface Impoundment(s) (also use Form D11)
___ Other

If applicable, hazardous wastes are treated in:
___ Surface Impoundment(s) (also use Form D11)
___ Waste pile(s) (also use Form D12)
___ Land treatment (also use Form D13)
___ Incinerator (also use Form D15)
___ Aboveground tank(s) (also use Form D2)
___ Underground tank(s) (also use Form D2)
___ Container(s)
___ Other
___ Thermal treatment (also use Form D15)
___ Chemical, physical & biological treatment (also use Form D16)

If applicable, hazardous waste are disposed in:
___ Surface Impoundment(s) (also use Form D11)
___ Land treatment (also use Form D13)
___ Landfill (also use Form D14)
___ Incinerator (also use Form D15)

WASTE STREAM(S)

HAZARDOUS WASTE # CODE/NAME	SOURCE	TYPE OF STORAGE	HOW MUCH/ TIME PERIOD
D001 -	Part washer	___	~220 /m

(rev. 05/23/90)

PR5122-14

Treatment/Storage/Disposal Facility
Form D9

HAZARDOUS WASTE # CODE/NAME	SOURCE	TYPE OF STORAGE	HOW MUCH/ TIME PERIOD

LAND BAN WASTE YES ✓ NO ____

Comments: See Consent Judgement No D89 6514 AA between Grefe & DNR (May 1991)

Treatment/Storage/Disposal Facility
Form D9

HAZARDOUS WASTE # CODE/NAME	SOURCE	TYPE OF STORAGE	HOW MUCH/ TIME PERIOD

LAND BAN WASTE YES ✓ NO ____

Comments: See Consent Judgement No D89 6514 AA between Grede & DNR- (May 1991

	Violation Class	Yes	No	N/A
ENVIRONMENTAL AND HUMAN HEALTH STANDARDS GENERALLY (Rule 602)				
1. Is the TSDF operated in a manner that will prevent the following: (Rule 602)				
a) Violations of Federal Clean Water Act or Act 245. (Rule 602(1)(a))	(N/A)	✓		
b) Air emissions in violation of the Federal Clean Air Act or Act 348. (Rule 602(1)(b))	(N/A)	✓		
c) Degradation, as defined in act 245, of a sole-source aquifer. (Rule 602(1)(c))	(N/A)	✓		
d) Exposure of humans or the environment to harmful quantities of hazardous waste/ constituents. (Rule 602(1)(d))	(N/A)	✓		
e) Pollution, impairment or destruction of natural resources of the state. (Rule 602(1)(e))	(N/A)	✓		
GENERAL FACILITY STANDARDS (265.12)				
2. Does the facility have an EPA id #. (265.11)	(I)	✓		
3. If required, have the following been notified:				
a) Director of receipt of hazardous waste from a foreign source. (265.12(a))	(II)			✓
b) Director on change in owner/operator. (265.12(b))	(II)			✓
GENERAL WASTE ANALYSIS (265.13)				
4. Has the owner/operator obtained a detailed chemical and physical analysis of the waste. (265.13(a)(1))	(I)	✓		
5. If necessary, has analysis been repeated to ensure it accurate. (265.13(a)(3)(i-ii))	(I)	✓		
6. If necessary, is waste received from off-site inspected/analyzed to determine if it matches the manifest. (265.13(a)(4))	(I)			✓

C nts: _____

	Violation Class	Yes	No	N/A
7. Does the owner/operator have a detailed waste analysis plan on file at the facility, which includes:				
a) The parameters to analyze waste. (265.13(b)(1))	(I)	✓		
b) Test and sampling methods. (265.13(b)(2&3))	(I)	✓		
c) Frequency initial analysis will be reviewed or repeated. (265.13(b)(4))	(I)	✓		
d) For off-site waste, analysis from generator & any additional analysis required. (265.13(b)(5&6))	(I)			✓
e) For surface impoundments, exempt from land disposal restrictions under 268.4(a), the following schedule and procedures.				
i) Sampling of impoundments.(265.13(b)(7)(i))	(I)			✓
ii) Analysis of test data and annual removal of residues. (265.13(b)(7)(ii&iii)(A)(B)(1-2))	(I)			✓
8. Does the waste analysis plan specify procedures for inspection and analysis of each off-site waste to ensure that it matches the manifest. (265.13(c)(1-2))	(I)	✓		

SECURITY (265.14)

9. Is unknowing entry prevented into active portion (unless demonstrated to Director the physical contact and disturbance will not cause a violation), by:				
a) 24-hour surveillance. (265.14(b)(1)	(I)	✓		
OR				
b) Artificial or natural barrier and controlled entry. (265.14(b)(2)(i&ii)	(I)	✓		
c) Danger sign(s) at entrance. (265.14(c))	(I)	✓		

GENERAL INSPECTION REQUIREMENTS (265.15)

Does the owner/operator inspect the facility for malfunctions, deterioration, operator errors and discharges of hazardous waste that may effect human health or the environment. (265.15(a))	(II)	✓		

	Violation Class	Yes	No	N/A
7. Does the owner/operator have a detailed waste analysis plan on file at the facility, which includes:				
a) The parameters to analyze waste. (265.13(b)(1))	(I)	✓		
b) Test and sampling methods. (265.13(b)(2&3))	(I)	✓		
c) Frequency initial analysis will be reviewed or repeated. (265.13(b)(4))	(I)	✓		
d) For off-site waste, analysis from generator & any additional analysis required. (265.13(b)(5&6))	(I)			✓
e) For surface impoundments, exempt from land disposal restrictions under 268.4(a), the following schedule and procedures.				
i) Sampling of impoundments.(265.13(b)(7)(i))	(I)			✓
ii) Analysis of test data and annual removal of residues. (265.13(b)(7)(ii&iii)(A)(B)(1-2))	(I)			✓
8. Does the waste analysis plan specify procedures for inspection and analysis of each off-site waste to ensure that it matches the manifest. (265.13(c)(1-2))	(I)	✓		

SECURITY (265.14)

9. Is unknowing entry prevented into active portion (unless demonstrated to Director the physical contact and disturbance will not cause a violation), by:				
a) 24-hour surveillance. (265.14(b)(1)	(I)	✓		
OR				
b) Artificial or natural barrier and controlled entry. (265.14(b)(2)(i&ii)	(I)	✓		
c) Danger sign(s) at entrance. (265.14(c))	(I)	✓		

GENERAL INSPECTION REQUIREMENTS (265.15)

Does the owner/operator inspect the facility for malfunctions, deterioration, operator errors and discharges of hazardous waste that may effect human health or the environment. (265.15(a))	(II)	✓		

		Violation Class	Yes	No	N/A
11.	Does the owner/operator have a written inspection schedule kept at the facility. (265.15(b)(1&2))	(II)	✓		
	Is the following being inspected and for:				
	a) Monitoring equipment. (265.15(b)(1))	(II)	✓		
	b) Safety & emergency equipment. (265.15(b)(1))	(II)	✓		
	c) Security devices. (265.15(b)(1))	(II)	✓		
	d) Operating and structural equipment (i.e.: dikes, pumps, etc.) 265.15(b)(1))	(II)	✓		
	e) Types of problems to be looked for (i.e.: leaky fittings, eroding dike, etc.) (265.15(b)(3))	(II)	✓		
	f) Inspection frequency based on: (265.15(b)(4))				
	i) Possible deterioration rate of equipment.	(II)	✓		
	ii) Areas subject to spills daily.	(II)	✓		
12.	Does the owner/operator keep a record of inspections in an inspection log at the facility. (264.15(b)(2)&(d))	(II)	✓		
	Does the log contain the following:				
	a) Date and time of inspection.	(II)	✓		
	b) Name of the inspector.	(II)	✓		
	c) Notation of observations made.	(II)	✓		
	d) Date and nature of repairs or other remedial actions.	(II)	✓		
13.	Were malfunctions/deterioration of equipment or structures remedied on a schedule which ensures that the problem does not lead to an environmental or human health hazard. And where a hazard is imminent or already occurred remedial action is taken immediately. (265.15(c))	(I)			✓

Comments: Note items 11 & 12 are for the closed loop system approved by DNR — No Haz waste Treatment presently Taking Place

		Violation Class	Yes	No	N/A
PERSONNEL TRAINING (265.16)					
14.	Do personnel training records contain the following:				
a)	Job title? (265.16(d)(1))	(II)	✓		
b)	Job descriptions? (265.16(d)(2))	(II)	✓		
c)	Name of employee filling jobs? (265.16(d)(1))	(II)	✓		
d)	Description of type & amount of both introductory and continued training? (265.16(d)(3)	(II)	✓		
e)	Is training designed to ensure that facility personnel are able to respond effectively to emergencies? (265.16(a)(3)	(I)	✓		
f)	Records of training? (265.16(d)(4))	(II)	✓		
g)	Do new personnel receive required training within 6 months? (265.16(b))	(I)	✓		
h)	Do personnel training records indicate that personnel have taken part in an annual review of initial training? (265.16(c))	(I)	✓		
GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE OR INCOMPATIBLE WASTE (265.17)					
15.	If required, are the following taken:				
a)	Ignitable/reactive waste separated and protected from ignition sources with 'No smoking' signs. (265.17(a))	(I)			✓
b)	Take precautions to prevent reactions which generate extreme heat, fire, gases, damage the facility, or other like means that threatens human health & environment. (265.17(b))	(I)			✓

Comments: _____

PREPAREDNESS AND PREVENTION (265.30)

	Is the facility maintained and operated to minimize the possibility of fire, explosion, or release of hazardous waste or hazardous waste constituent? (265.31)	(I)	✓		

	Violation Class	Yes	No	N/A
17. If required, does this facility have the following equipment:				
a) Internal communications or alarm systems? (265.32(a))	(I)	✓		
b) Telephone or 2-way radios at the scene of operations? (265.32(b))	(I)	✓		
c) Portable fire extinguishers, fire control, spill control equipment and decontamination equipment? (265.32(c))	(I)	✓		
d) Adequate volume of water and/or foam available for fire control? (265.32(d))	(I)	✓		
18. Testing and Maintenance of Emergency Equipment:				
a) Does the owner or operator test and maintain emergency equipment to assure proper operation? (265.33)	(I)	✓		
b) Has owner/operator provided immediate access to internal alarms? (265.34(a&b)				
i) When hazardous waste is being poured, mixed, etc.	(I)			✓
ii) One employee on the premises while facility is operating.	(I)			✓
c) Is there adequate aisle space for unobstructed movement for personnel and emergency equipment? (265.35)	(I)			✓

Comments: _____

CONTINGENCY PLAN AND EMERGENCY PROCEDURES (265.50)

19. Was the contingency paln immediately implemented whenever a fire, explosion or release of hazardous waste could threaten human health or the environment? (265.51(b)	(I)	✓		

Comments: For the old process - which is not used now

	Violation Class	Yes	No	N/A
20. Does the contingency plan contain the following information:				
a) The actions facility personnel must take in response to fires, explosions, or any unplanned release of hazardous waste? (See any PIPP or SPCC plan that can be added to.) (265.52(a)&(b))	(I)	✓		
b) Describe arrangements or attempts to make arrangements agreed to by local police and fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services, pursuant to (265.52(c)) & (265.37)(c))?	(II)	✓		
c) Names, addresses and phone numbers (office and home) of all persons qualified to act as emergency coordinator? (265.52)(d))	(II)	✓		
d) A list of all emergency equipment at the facility which includes the location and physical description of each item on the list, and a brief outline of its capabilities? (265.52(e))	(II)	✓		
e) An evacuation plan for facility personnel if evacuation could be necessary? (This plan must describe signal(s) to be used to begin evacuation, evacuation routes and alternate evacuation routes.) (265.52(f))	(II)	✓		
21. Emergency Coordinator and Emergency Procedures:				
a) Is coordinator familiar with all aspects of site operation and emergency procedures? (265.55)	(II)	✓		
b) Does the emergency coordinator have the authority to carry out the contingency plan? (265.55)	(II)	✓		
c) If an emergency situation has occurred at this facility, has the emergency coordinator followed the emergency procedures? (265.56)	(I)	✓		

Comments: _____

	Violation Class	Yes	No	N/A
22. Plan Amendments and Copies:				
a) Has the contingency plan been amended to reflect changes in regulations, plan factor changes in the facility, list of emergency coordinators, changes in emergency equipment? (265.54)	(II)	✓		
b) Are copies of the contingency plan available on site and local emergency organizations? (265.53)	(II)	✓		

USE OF MANIFESTS (Rule 608: 40 CFR 265.71 & 265.72)

23. If the facility receives hazardous waste accompanied by a manifest, complete the following:				
a) Sign & date each copy. (608(1)(a):265.71(a)(1))	(I)		✓	
b) Note any significant discrepancies. (608(1)(b):265.71(a)(2)	(I)			✓
c) Give the transporter 1 signed copy of the manifest. (608(1)(c):265.71(a)(3))	(I)			✓
d) Copy sent to generator w/in 30 days and MDNR with in 10 days after the end of the month in which the waste was received. (608(1)(d&f): 265.71(a)(4))	(I)			✓
e) Retain copy on-site. (608(1)(e):265.71(a)(5))	(I)			✓
24. If applicable, complied with requirement for bulk shipments of hazardous waste by rail or water transporter. (608(2):265.71(b))	(I)			✓
25. Notified the Director if a significant discrepancy is not corrected with the generator with in 15 days. (608(4):265.72))	(I)			✓

Comments: _____

	Violation Class	Yes	No	N/A
RECORDKEEPING (Rule 609: 40 CFR 265.73 & 265.74)				
26. Does the owner/operator maintain an operating record on-site with the following information recorded.				
a) Description and quantity of hazardous waste received and method(s)/ date of its treatment, storage or disposal. (609(1)(a): 265.73(b)(1))	(II)	___	___	✓
b) Location & quantity of each hazardous waste within the facility (cross-referenced to specific manifest #) on a map. (609(1)(b):265.73(b)(2))	(II)	___	___	✓
c) Records and results of all waste analysis, trial tests, monitoring data, and operator inspections. (609(1)(c): 265.73(b)(3))	(II)	___	___	✓
d) Reports detailing all incidents that required implementation of the Contingency Plan. (609(1)(d): 265.73(b)(4))	(II)	___	___	✓
e) Records & results of inspections in 264.15 (question 11 & 12). (609(1)(e):265.73(b)(5))	(II)	___	___	✓
f) If required, monitoring, testing or analytical when required (gr.water monitoring, tanks, land treatment or thermal treatment. (609(1)(f):265.73(b)(6))	(II)	___	___	✓
g) Closure and post-closure cost estimates. (609(1)(j): 265.73(b)(7))	(II)	___	___	✓
h) Quantity and date of placement of in a land disposal unit of waste with an extension to the land disposal restriction. (609(1)(k): 265.73(b)(8))	(II)	___	___	✓
i) Off-site treatment, a copy of notice or certification/demonstration from the generator. (609(1)(l): 265.73(b)(9))	(II)	___	___	✓
j) On-site treatment, information contained in a notice (except manifest #) or certification/ demonstration. (609(1)(m): 265.73(b)(10))	(II)	___	___	✓
k) Off-site land disposal, a copy of notice or certification/demonstration from the generator. (609(1)(n): 265.73(b)(11))	(II)	___	___	✓

Comments: facility closed then Haz. waste units.

	Violation Class	Yes	No	N/A
RECORDKEEPING (Rule 609: 40 CFR 265.73 & 265.74)				
26. Does the owner/operator maintain an operating record on-site with the following information recorded.				
a) Description and quantity of hazardous waste received and method(s)/ date of its treatment, storage or disposal. (609(1)(a): 265.73(b)(1))	(II)	___	___	✓
b) Location & quantity of each hazardous waste within the facility (cross-referenced to specific manifest #) on a map. (609(1)(b):265.73(b)(2))	(II)	___	___	✓
c) Records and results of all waste analysis, trial tests, monitoring data, and operator inspections. (609(1)(c): 265.73(b)(3))	(II)	___	___	✓
d) Reports detailing all incidents that required implementation of the Contingency Plan. (609(1)(d): 265.73(b)(4))	(II)	___	___	✓
e) Records & results of inspections in 264.15 (question 11 & 12). (609(1)(e):265.73(b)(5))	(II)	___	___	✓
f) If required, monitoring, testing or analytical when required (gr.water monitoring, tanks, land treatment or thermal treatment. (609(1)(f):265.73(b)(6))	(II)	___	___	✓
g) Closure and post-closure cost estimates. (609(1)(j): 265.73(b)(7))	(II)	___	___	✓
h) Quantity and date of placement of in a land disposal unit of waste with an extension to the land disposal restriction. (609(1)(k): 265.73(b)(8))	(II)	___	___	✓
i) Off-site treatment, a copy of notice or certification/demonstration from the generator. (609(1)(l): 265.73(b)(9))	(II)	___	___	✓
j) On-site treatment, information contained in a notice (except manifest #) or certification/ demonstration. (609(1)(m): 265.73(b)(10))	(II)	___	___	✓
k) Off-site land disposal, a copy of notice or certification/demonstration from the generator. (609(1)(n): 265.73(b)(11))	(II)	___	___	✓

Comments: facility closed their Haz. waste units.

	Violation Class	Yes	No	N/A
l) On-site land disposal, information contained in a notice (except manifest #) or certification/ demonstration. (609(1)(o): 265.73(b)(12))	(II)	___	___	✓
m) Off-site storage, a copy of notice or certification/demonstration from the generator. (265.73(b)(13))	(II)	___	___	✓
n) On-site storage, information contained in a notice (except manifest #) or certification/ demonstration. (265.73(b)(14))	(II)	___	___	✓
27. Are all required records maintained and available for inspection. (609(2&3): 265.74(a))	(II)	___	___	✓

Comments: _____

_____

_____

_____

_____

REPORTING (Rule 610: 40 CFR 265.75 - 265.77)

28. Has the owner/operator submitted a biennial report to the Regional Administrator by March 1 of even numbered years. (610: 265.75)	(II)	✓	___	___
29. If hazardous waste is received from off-site has: (610(2): 265.76)				
a) The facility accepted any waste without a manifest or shipping paper.	(I)	___	___	✓
b) If 'a' is yes, was the Director provided with a report with in 15 days.	(I)	___	___	✓
30. If applicable, has the owner/operator submitted reports for: releases, fires, explosions (see emergency procedures); ground-water contamination; facility closure. (265.77(a-c))	(I)	___	___	✓
31. Has the owner/operator of a hazardous waste disposal/ treatment on the site of generation submitted a monthly report to the Director. (610(3))	(N/A)	___	___	✓

		Violation Class	Yes	No	N/A
	CLOSURE AND POST-CLOSURE (Rule 613: 40 CFR Subpart G)				
32.	If applicable do certain surface impoundment and waste piles have contingent closure plans. (613(1): 265.112(a&b))	(I)	___	___	✓
33.	Does the facility have a written closure plan. Does the plan identify: (613(1): 265.112(a&b))				
	a) Description of how each hazardous waste unit will be closed. (265.112(b)(1))	(I)	___	___	1 ✓
	b) Maximum extent unclose during the facility life with description of final closure. (265.112(b)(2))	(I)	___	___	✓
	c) Maximum inventory of waste. (265.112(b)(3))	(I)	___	___	✓
	d) Description of steps to remove or decontaminate equipment, soils, etc. (265.112(b)(4))	(I)	___	___	✓
	e) Description of other closure activities to satisfy closure performance standards. (265.112(b)(5))	(I)	___	___	✓
	f) Schedule of closure activities. (265.112(b)(6))	(I)	___	___	✓
34.	Is a written closure cost estimate available and was cost adjusted for inflation. (265.142(a&b))	(I)	___	___	___
	Note: Disposal facilities need post-closure				
35.	If applicable do certain surface impoundment and waste piles have contingent closure plans. (613(1): 265.118(a&c))	(I)	___	___	✓
36.	Does the facility have a written post-closure plan. Does the plan identify: (613(1): 265.118(a&c))				
	a) Description of the planned monitoring activities (i.e.: waste piles, etc.). (265.118(c)(1))	(I)	___	___	✓
	b) Description of maintenance activities and the frequencies for: (265.118(c)(2))				
	i) Integrity of cap/final cover or other containment systems. (265.118(c)(2)(i))	(I)	___	___	✓
	ii) Monitoring equipment. (265.118(c)(2)(ii))	(I)	___	___	✓

	Violation Class	Yes	No	N/A
c) Name, address and phone number of person or office to contact during post-closure care period. (265.118(c)(3))	(I)	___	___	✓
37. Is a written post-closure cost estimate available and was cost adjusted for inflation. (265.142(a&b))	(I)	___	___	✓
38. If changes to the approved closure or post-closure plan were made did the owner/operator first submit a written request to make said changes. (265.112(c))	(I)	___	___	✓

Comments: closure of Haz unit has taken Place

USE/MANAGEMENT OF CONTAINERS IN STORAGE (Rule 614: refers to 40 CFR Subpart I)

39. Is each container labeled or marked clearly with the words "Hazardous Waste"? (614(1)(b)) If no, how many ____?	(N/A)	___	___	✓
40. Are containers in good condition? (265.171) If no, specifically what is their condition? ____.	(I)	___	___	✓
41. Are containers compatible with waste in them? (265.172) If no, explain ____.	(I)	___	___	✓
42. Are containers stored closed? (265.173(a)) If no, how many ____?	(I)	___	___	✓
43. Are containers managed to prevent leaks? (265.173(b)) If no, explain ____.	(I)	___	___	✓
44. Are containers inspected weekly for leaks and defects? (265.174)	(I)	___	___	✓
45. Container storage areas must have a containment system designed and operated as follows if the waste contains free liquids or is F020, F021, F022, F023, F026, F027:				
a) Impervious base free of cracks? (265.175(b)(1))	(I)	___	___	✓
b) Sloped or otherwise designed to elevate or protect containers from contact with accumulated liquids? (265.175(b)(2))	(I)	___	___	✓

	Violation Class	Yes	No	N/A
c) Containment capable of holding 10% of volume of containers or 10% of largest container, whichever is greater? (265.175(b)(3))	(I)	___	___	✓
d) Run-on prevented unless capacity in excess of question 46(c)? (265.175(b)(4))	(I)	___	___	✓
e) Accumulated liquids (waste and/or precipitation removed in a timely manner to prevent overflow? (265.175(b)(5))	(I)	___	___	✓

Comments: No waste in storage

46. If stored hazardous waste is solid (or any waste F020, F021, F022, F023, F026, F027) is the storage area sloped or otherwise designed, or containers elevated or otherwise protected from contact with liquids? (265.175(c))	(I)	___	___	✓
47. Are ignitable and reactive wastes stored at least 15 meters (50 feet) from property line? (Indicate if waste is ignitable or reactive.) (265.176) If no, explain _____.	(I)	___	___	✓
48. Are incompatible wastes stored in separate containers? (If not, the provisions of 40 CFR 264.17(b) apply.) (265.177(a)) If no, explain _____.	(I)	___	___	✓
49. Are hazardous wastes placed in containers that previously held incompatible material.(265.177(b))	(I)	___	___	✓
50. Are containers of incompatible waste separated or protected from each other by physical barriers or sufficient distance? (265.177(c))	(I)	___	___	✓

PRE-TRANSPORT REQUIREMENTS (Rule 305: 40 CFR 262.30)

5 Is waste packaged in accordance with DOT regulations (required prior to movement of hazardous waste off-site)? (Rule 305(1)(a): 40 CFR 262.30).	company rep said / observed			✓
	(I)	✓	___	N/A

Are waste packages marked and labeled in accordance with DOT regulations concerning hazardous materials (required prior to movement of hazardous waste off-site)? (Rule 305(1)(b)(c): 40 CFR 262.31 & 262.32(a))

company rep said ✓ observed ___

(I) [✓] ___ ___

53. On containers of 110 gallons or less, does the appropriate information displayed include a warning and generator's name, address, manifest document number and waste code as required in 40 CFR 172.304? (Rule 305(1)(d): 40 CFR 262.32(b))

company rep said ✓ observed ___

(I) [✓] ___ ___

54. If required, are placards available to the transporter? (Rule 305(1)(e): 40 CFR 262.33)

company rep said ✓ observed ___

(I) [_] ___ ✓

Comments: _____

TDSF Generator Appendix Inspection Form
Form D1
n

TSDF GENERATOR APPENDIX INSPECTION FORM

Facility's Name Grede Foundry Inc

INSPECTION FORM D1
Part 6 Rules
P.A. 64 of 1979

Date 12-20-93 I.D. # MID 005 131 840

Drums (Containers)
Above ground tank(s)
Underground tank(s)
Other _____

WASTE STREAM(S)

HAZARDOUS WASTE # CODE/NAME	SOURCE	TYPE OF STORAGE	HOW MUCH/ TIME PERIOD
D001	Part washer	No	# 220 / month

LAND BAN WASTE YES ✓ NO _____

COMMENTS: See SQG inspection form
Date 12-20-93

IF THE HAZARDOUS WASTE BEING GENERATED IS: SEPARATE FROM OR IN ADDITION TO THE TSDF WASTE; THE CONTINGENCY PLAN &/OR PERSONNEL TRAINING RECORDS FOR THE GENERATION AREAS ARE SEPARATE RECORDS FROM THE TSDF; OR THE IMPORT/EXPORT DATA IS SEPARATE-THEN USE THE GENERATOR INSPECTION FORM B INSTEAD OF THIS SHORT FORM - example: use for storage/generation areas

I - not inspected **N/A - not applicable**

TDSF Generator Appendix Inspection Form
Form D1
n

	Violation Class	Yes	No	NI N/A
MANIFEST REQUIREMENTS (Rule 304: 40 CFR 262.20)				
1. Does the generator have copies of the manifest available for review and on-site for the past 3 years? (Rule 307(3): 40 CFR 262.40(a))	(II)	[✓]	___	NI N/A
2. Do the manifest forms examined contain the following information? (If so, make copies of, or record information from manifests that do not contain the critical elements) Examine for last 3 years or last inspection:			_	
a) Manifest document number. (Rule 304(2)(a): 40 CFR 262.20(a))	(II)	[✓]	___	NI N/A
b) The generator's name, mailing address, telephone number and EPA ID Number. (Rule 304(2)(a)(b): 40 CFR 262.20(a))	(I)	[✓]	___	NI N/A
c) The name and EPA ID number of Transporter. (Rule 304(2)(c): 40 CFR 262.20(a))	(II)	[✓]	___	NI N/A
d) Name, address and EPA ID number of designed permitted facility and alternate facility. (Rule 304(2)(d): 40 CFR 262.20(6)(b)(c))	(I)	[✓]	___	NI N/A

COMMENTS: _____

---

e) The description of waste(s) (DOT shipping name, DOT hazard class, DOT identification number). „ (Rule 304(2)(e): 40 CFR 262.20(a))	(II)	[✓]	___	NI N/A
f) The total quantity of waste(s) and the type and number of containers loaded. (Rule 304(2)(f): 40 CFR 262.20(a))	(II)	[✓]	___	NI N/A

	Violation Class	Yes	No	NI N/A
g) Hazardous waste number describing the wastes. (Rule 304(2)(g): 40 CFR 262.20(a))	(II)	[✓]	___	NI N/A

COMMENTS: _____

_____

h) Certification as required. (Rule 304(2)(h): 40 CFR 262.20(a))	(II)	[✓]	___	NI N/A
i) Waste minimization program/ certification. (Rule 304(2)(i): 40 CFR 262.20(a))	(I)	[✓]	___	NI N/A
j) Signatures as required. (Rule 304(a)(b): 40 CFR 262.23(a))	(I)	[✓]	___	NI N/A

Comments: _____

_____

_____

3. Reportable exceptions; (Rule 308(3): 40 CFR 262.42)

a) For manifests examined in (2) (except for shipments within the last 35 days), enter the number of manifests for which the generator has NOT received a signed copy from the designated facility within 35 days of the date of shipment.

N/A

b) For manifests indicated in (3a), enter the number for which the generator has submitted exception reports 40 CFR 262.42(b) to the Regional Administrator and MDNR, after 45 days.

class I violation if an exception report was not submitted

N/A

Comments: _____

_____

_____

_____

_____

TDSF Generator Appendix Inspection Form
Form D1
n

	Violation Class	Yes	No	NI N/A
g) Hazardous waste number describing the wastes. (Rule 304(2)(g): 40 CFR 262.20(a))	(II)	[✓]	___	NI N/A

COMMENTS: _____

h) Certification as required. (Rule 304(2)(h): 40 CFR 262.20(a))	(II)	[✓]	___	NI N/A
i) Waste minimization program/ certification. (Rule 304(2)(i): 40 CFR 262.20(a))	(I)	[✓]	___	NI N/A
j) Signatures as required. (Rule 304(a)(b): 40 CFR 262.23(a))	(I)	[✓]	___	NI N/A

Comments: _____

3. Reportable exceptions; (Rule 308(3): 40 CFR 262.42)

a) For manifests examined in (2) (except for shipments within the last 35 days), enter the number of manifests for which the generator has NOT received a signed copy from the designated facility within 35 days of the date of shipment. N/A

b) For manifests indicated in (3a), enter the number for which the generator has submitted exception reports 40 CFR 262.42(b) to the Regional Administrator and MDNR, after 45 days. class I violation if an exception report was not submitted

Comments: _____

SMALL QUANTITY GENERATOR INSPECTION FORM

Facility Name Grede Foundry Inc

Date 12-20-93 ID # MID- 006-131-890

INSPECTION FORM A
Part 3 Rules
P.A. 64 of 1979

___ Containers
___ Tank(s) system
___ Other _____

WASTE STREAM(S)

HAZARDOUS WASTE CODE/NAME	SOURCE	TYPE OF STORAGE	HOW MUCH/ PER MONTH
D001	Part Washer	no	≥ 220 lb/month

LAND BAN WASTE YES ✓ NO ___
(Note: after November 8, 1988, land ban restrictions apply to SQG)

NI - not inspected N/A - not applicable

	Violation Class	Yes	No	NI N/A
WASTE EVALUATION (Rule 302: 40 CFR 262.11)				
1. Has generator determined if waste streams are hazardous waste? (Rule 302: 40 CFR 262.11)	(I)	[✓]	___	NI N/A
Comments: _____				
2. Has the generator kept a copy of the waste evaluation(s) for 3 years since the waste was last shipped off-site (262.11). (Rule 307(1): 40 CFR 262.40(c))	(II)	[✓]	___	NI N/A
EPA IDENTIFICATION NUMBER (Rule 303: 40 CFR 262.12)				
3. Has the facility obtained a U.S. EPA identification number? (Rule 303: 40 CFR 262.12)	(I)	[✓]	___	NI N/A

(rev. 04/16/93)

	Violation Class	Yes	No	NI N/A

MANIFEST REQUIREMENTS (RULE 304: 40 CFR 262.20)

4. Does the generator have copies of the manifest available for review. (Must maintain copies for 3 years, if no see #9) (Rule 307(3): 40 CFR 262.40(a)). (II) [✓] ___ NI N/A

5. Do the manifest forms examined contain the following information (If so, make copies of, or record information from the manifests that do not contain the critical elements) Examine for the past 3 years or last inspection:

a) Manifest document number. (Rule 304(2)(a): 40 CFR 262.20(a)) (II) [✓] ___ NI N/A

Comments: _____

b) The generator's name, mailing address, telephone number, and EPA Identification number. (Rule 304(2)(b)): 40 CFR 262.20(a)) (I) [✓] ___ NI N/A

c) The name & EPA ID number of transporter. (Rule 304(2)(c): 40 CFR 262.20(a)) (II) [✓] ___ NI N/A

d) Name, address, and EPA ID number of designed permitted facility and alternate facility. (Rule 304(2)(d): 40 CFR 262.20(b) & 262.20(c)) (I) [✓] ___ NI N/A

Comments: _____

_____

e) The description of waste(s) (DOT shipping name, DOT hazard class, DOT identification number). (Rule 304(2)(e): 40 CFR 262.20(a)) (II) [✓] ___ NI N/A

Comments: _____

_____

f) The total quantity of waste(s) and the type and number of containers loaded. (Rule 304(2)(f): 40 CFR 262.20(a)) (II) [✓] ___ NI N/A

g) Hazardous waste number describing the wastes. (Rule 304(2)(g): 40 CFR 262.20(a)) (II) [✓] ___ NI N/A

Comments: _____

	Violation Class	Yes	No	NI N/A
h) Certification as required. (Rule 304(2)(h): 40 CFR 262.20(a))	(II)	[✓]	___	NI N/A
i) Signatures as required in (Rule 304(4): 40 CFR 262.23(a))	(I)	[✓]	___	NI N/A

Comments: _____

_____

6. Is the generator using a manifest that has expired? (Must use current EPA form 8700-22) (Rule 304(2): 40 CFR 262.20(a)) (II) ___ [✓] NI N/A

7. Has the generator submitted a copy of the manifest (either MI or out-of-State) to the director no later than 10 days after the month the shipment was made? (Rule 304(4)(d)) (N/A) [✓] ___ NI N/A

8. Reportable exceptions; (Rule 308(5))

   a) For manifests examined in (2) (except for shipments within the last 60 days), enter the number of manifests for which the generator has NOT received a signed copy from the designated facility within 60 days of the date of shipment. N/A

   b) For manifests indicated in (8a), enter the number for which the generator has submitted reports to the director & to the Regional Administrator 60 days after the date of the initial shipment? N/A

Comments: _____

_____

_____

9. If the facility did not manifest their hazardous waste off-site were the following requirements met: (Rule 304(5)(a)&(b) and 40 CFR 262.20(e))

   a) The waste is reclaimed under a contractual agreement and the regenerated material goes back to the facility. (I) [_] ___ NI N/A

Comments: _____

	Violation Class	Yes	No	NI N/A
b) The facility maintains a copy of the reclamation agreement for a period of 3 years after termination.	(II)	[_]	___	NI N/A

For waste that is shipped under a tolling agreement (see question #9) the only requirements under Waste Analysis and Recordkeeping that must be met are indicated with a **** for the initial shipment ONLY. (268.7(a)(10)

Comments: _____

_____

WASTE ANALYSIS AND RECORDKEEPING (268.7)

NOTE: The 20 new organics under TC; wood preserving waste F032 (stay on F037 & F038 standard); and coke wastes K141-K145 & K147-K148, do not have land ban standards at this time.

10. Did the generator determine if the waste is restricted from land disposal? (268.7(a))

a) All listed wastes?	(I)	[_]	___	NI N/A
b) All characteristic wastes?	(I)	[✓]	___	NI N/A

Comments: _____

_____

NOTE: All applicable waste codes must be identified (262.11 & 268.9(b)) and all associated treatment standards. However, where a waste has both listed and characteristic waste codes, the code for the listed waste is sufficient provided that the treatment standard for listed waste includes a treatment standard for the constituent that caused the waste to exhibit the characteristic. (268.9(b))

11. If the restricted waste exceeds the treatment standards/prohibitions did a notice go with each shipment? (268.7(a)(1)) *** (I) [✓] ___ NI N/A

AND

12. Did the notice include: ***

a) EPA hazardous waste #? (268.7(a)(1)(i))	(I)	[_]	___	NI N/A
b) Treatment information: Standards for F001-F005, F039? (268.7(a)(1)(ii))	(I)	[_]	___	NI N/A

NOTE: F001-F005 wastewater is less than 1% by weight TOC or less than 1% by weight total F001-F005 solvent constituents. (268.2(f)(1))

Comments: _____

	Violation Class	Yes	No	NI N/A
c) Standards for waste exceeding ≥ 50 ppm PCB; ≥ 1000 mg/l HOC. (268.7(a)(1)(ii))	(I)	[_]	___	NI N/A

Comments: _____

_____

d) All other waste: (268.7(a)(1)(ii)) i) Standards?	(I)	[_]	___	NI N/A
OR				
ii) Standards referenced and include:				
a) Wastewater or nonwastewater?	(I)	[✓]	___	NI N/A
b) Applicable subdivisions?	(I)	[✓]	___	NI N/A
c) CFR section and paragraph?	(I)	[✓]	___	NI N/A
d) If applicable, treatment technology 5-letter code?	(I)	[_]	___	NI N/A

Comments: _____

_____

_____

NOTE: F020-F023 & F026-F028 and other waste codes wastewater is less than 1% TOC by weight and less than 1% total suspended solids (TSS) by weight except K011-K014 wastewater is less than 5% by weight TOC and less than 1% by weight TSS; K103-K104 wastewater is less than 4% by weight TOC and less than 1% by weight TSS in (268.2(f)(1-3).

NOTE: An alternate treatment technology or standard may be used after approval from the Administrator. 268.40(b); 268.43(b); 268.44

e) Generator manifest number associated with the waste shipment? (268.7(a)(1)(iii))	(I)	[✓]	___	NI N/A
f) Waste analysis data, where needed? (268.7(a)(1)(iv))	(I)	[✓]	___	NI N/A

Comments: _____

_____

_____

_____

_____

	Violation Class	Yes	No	NI N/A
13. If the restricted waste does not exceed the treatment standards/prohibitions did a notice go with each shipment? (268.7(a)(2)) ****	(I)	[_]	___	NI N/A
AND				
14. Did the notice include: ****				
a) EPA hazardous waste #? (268.7(a)(2)(i)(A))	(I)	[_]	___	NI N/A
b) Treatment information: Standards for F001-F005, F039? (268.7(a)(2)(B))	(I)	[_]	___	NI N/A
c) Standards for waste exceeding ≥ 50 ppm PCB; ≥ 1000 mg/l HOC. 268.7(a)(2)(B))	(I)	[_]	___	NI N/A

Comments: _____

_____

d) All other waste? (268.7(a)(2)(B)) i) Standards?	(I)	[_]	___	NI N/A
OR				
ii) Standards referenced and include:				
a) Wastewater or nonwastewater?	(I)	[_]	___	NI N/A
b) Applicable subdivisions?	(I)	[_]	___	NI N/A
c) CFR section and paragraph?	(I)	[_]	___	NI N/A
d) If applicable, treatment technology 5-letter code?	(I)	[_]	___	NI N/A

NOTE: An alternate treatment technology or standard may be used after approval from the Administrator. 268.40(b); 268.43(b); 268.44

e) Generator manifest number associated with the waste shipment? (268.7(a)(2)(i)(C))	(I)	[_]	___	NI N/A
f) Waste analysis data, where needed? (268.7(a)(2)(i)(D))	(I)	[_]	___	NI N/A
g) Certification statement? (268.7(a)(2)(ii))	(I)	[_]	___	NI N/A

Comments: _____

_____

_____

_____

	Violation Class	Yes	No	NI N/A
15. If the restricted waste is subject to an exemption from prohibition did a notice go with each shipment? (268.7(a)(3))	(I)	[_]	___	NI N/A
16. Did the notice include:				
a) EPA hazardous waste #? (268.7(a)(3)(i))	(I)	[_]	___	NI N/A
b) Treatment information: Standards for F001-F005, F039? (268.7(a)(3)(ii))	(I)	[_]	___	NI N/A
c) Standards for waste liquid hazardous having a pH ≤ 2; ≥ 50 ppm PCB; ≥ 1000 mg/l HOC. (268.7(a)(3)(ii))	(I)	[_]	___	NI N/A

Comments: _____

_____

d) Fir all other waste? (268.7(a)(3)(ii)) i) Standards listed?	(I)	[_]	___	NI N/A
OR				
ii) Standards referenced by including:				
a) Wastewater or nonwastewater?	(I)	[_]	___	NI N/A
b) Applicable subdivisions?	(I)	[_]	___	NI N/A
c) CFR section and paragraph?	(I)	[_]	___	NI N/A
d) If applicable, treatment technology 5-letter code?	(I)	[_]	___	NI N/A

NOTE: An alternate treatment technology or standard may be used after approval from the Administrator. 268.40(b); 268.43(b); 268.44

e) Generator manifest number associated with the waste shipment? (268.7(a)(3)(iii))	(I)	[_]	___	NI N/A
f) Waste analysis data, where needed? (268.7(a)(3)(iv))	(I)	[_]	___	NI N/A
g) Date the waste is subject to the prohibition? (268.7(a)(3)(v))	(I)	[_]	___	NI N/A

Comments: _____

_____

_____

	Violation Class	Yes	No	NI N/A
17. If the facility designated an alternative treatment standard (268.42) for a lab pack with waste identified in appendix IV or organic waste identified in appendix V, did a notice go with each shipment? (268.7(a)(8) & (9))	(I)	[_]	___	NI N/A
AND				
18. Did the notice include: (268.7(a)(8) & (9) refers to 268.7(a)(1))				
a) EPA hazardous waste #? (268.7(a)(1)(i))	(I)	[_]	___	NI N/A
b) Treatment information: Standards for F001-F005, F039? (268.7(a)(1)(ii))	(I)	[_]	___	NI N/A
c) Standards for liquid hazardous waste having a pH ≤ 2; ≥ 50 ppm PCB; ≥ 1000 mg/l HOC. (268.7(a)(1)(ii))	(I)	[_]	___	NI N/A

Comments: _____

d) For all other waste? (268.7(a)(1)(ii)) i) Standards listed?	(II)	[_]	___	NI N/A
OR				
ii) Standards referenced by including: a) Wastewater or nonwastewater?	(I)	[_]	___	NI N/A
b) Applicable subdivisions?	(I)	[_]	___	NI N/A
c) CFR section and paragraph?	(I)	[_]	___	NI N/A
d) If applicable, treatment technology 5-letter code?	(I)	[_]	___	NI N/A

NOTE: An alternate treatment technology or standard may be used after approval from the Administrator. 268.40(b); 268.43(b); 268.44

e) Generator manifest number associated with the waste shipment? (268.7(a)(1)(iii))	(I)	[_]	___	NI N/A
f) Waste analysis data, where needed? (268.7(a)(1)(iv))	(I)	[_]	___	NI N/A
g) Certification statement? (268.7(a)(8) or (9))	(I)	[_]	___	NI N/A

Comments: _____

	Violation Class	Yes	No	NI N/A
19. Did the generator retain on-site all records to support the determination based on knowledge or if based on testing the results? (268.7(a)(5))	(I)	[✓]	___	NI N/A

Comments: _____

_____

20. If the restricted waste is excluded from being a hazardous waste or solid waste did the generator place a one-time notice stating same in the facility file and include disposition of the waste? (268.7(a)(6)) (I) [_] ___ ~~NI~~ N/A

Comments: _____

_____

21. Were all record (certifications, notices) retained for 5 years on-site? (268.7(a)(7)) (I) [✓] ___ NI N/A

EXCEPT

22. The initial notice and certification for a tolling agreement and the agreement must be retained on-site for three years after termination of the agreement. (268.7(a)(10)) (I) [_] ___ ~~NI~~ N/A

Comments: _____

_____

NOTE: The requirement (268.7(a)(7)) applies to solid waste even when the hazardous characteristic is removed prior to disposal or when the waste is excluded from the definition of hazardous waste or solid waste (all notices mentioned above).

DILUTION PROHIBITED AS SUBSTITUTE FOR TREATMENT (268.3)

23. Did the generator dilute the hazardous waste or residue from treatment of a hazardous waste to avoid prohibition? (268.3(a)) (I) ___ [✓] ~~NI~~ N/A

Comments: _____

_____

_____

201. Dilution of characteristic waste only in a treatment system that discharges under CWA section 402 (NPDES) or treats waste for CWA section 307 is not permissible dilution for purposes of treatment unless specified in 268.42. (268.3(b))

	Violation Class	Yes	No	NI N/A

TREATMENT STANDARDS (268.41)

24. If wastes with differing treatment standards are mixed did the generator select the most stringent standards? (268.41(b) & 268.43(b)) (I) [_] ___ NI N/A

Comments: _____

PRE-TRANSPORTATION REQUIREMENTS (Rule 305: 40 CFR 262.30 - 262.32)

25. Is hazardous waste packaged in accordance with DOT regulations (required prior to movement of waste off-site)? (Rule 305(1)(a): 40 CFR 262.30) company rep said ✓ observed ___ (I) [✓] ___ NI N/A

26. Are waste packages marked and labeled in accordance with DOT regulations concerning hazardous materials (required prior to movement of hazardous waste off-site)? (Rule 305(1)(b)&(c): 40 CFR 262.31 & 262.32(a)) company rep said ✓ observed ___ (I) [✓] ___ NI N/A

27. On containers of 110 gallons or less, does the appropriate information displayed include a warning and generator's name. address, manifest document number and waste code as required in 49 CFR 172.304? (Rule 305(1)(d): 40 CFR 262.32(b)) company rep said ✓ observed ___ (I) [✓] ___ NI N/A

28. If required, are placards available to the transporter? (Rule 305(1)(e): 40 CFR 262.33)) (I) [_] ___ NI N/A

Comments: _____

ACCUMULATION TIME (Rule 306: 40 CFR 262.34)

29. If hazardous waste is accumulated in containers (i.e.: Drums/Roll-Off Boxes). If no, see tanks on page 13:

a) Is each container marked with the words "Hazardous Waste" as required (Rule 306(4)(d): 40 CFR 262.34(d)(4)) (I) [_] ___ NI N/A

	Violation Class	Yes	No	NI N/A
b) Is each container marked with the date accumulation began. (Rule 306(4)(c): 40 CFR 262.34(d)(4))	(I)	[_]	___	NI N/A
c) Has hazardous waste been stored on-site for 180 days or less? (Rule 306(4); 40 CFR 262.34(d)) or 270 days if waste must be transported over 200 miles. (Rule 306(5): 40 CFR 262.34(e))	(I)	[_]	___	NI N/A
d) Has quantity of waste exceeded 6000 kg? (Rule 306(4)(a): 40 CFR 262.34(d)(1))	(I)	___	[_]	NI N/A
e) Did the facility file for and receive an extension for 30 days? (Rule 306(6): 40 CFR 262.34(f))	(I)	[_]	___	NI N/A

NOTE: If no on #29 (c) &/or yes on #29 (d) and no on (e) or the 30 extension has expired, the facility is a storage facility.

Comments: No waste in storage

Subpart I regulations 265.170 to 265.177 except 265.175 (reserved) are referred to by Rule 306(4)(b)(i).

f) Are containers in good condition (265.171) If no, specifically what is their condition? _____	(I)	[_]	___	NI N/A
g) Are containers compatible with waste in them. (265.172) If no, explain: _____	(I)	[_]	___	NI N/A
h) Are containers stored closed. (265.173(a)) If no, how many? _____	(I)	[_]	___	NI N/A
i) Are containers handled or stored in a manner which may rupture the container or cause it to leak? (265.173(b)) If yes, explain: _____	(I)	___	[_]	NI N/A
j) Are containers inspected weekly for leaks and defects. (265.174)	(I)	[_]	___	NI N/A

Comments: _____

	Violation Class	Yes	No	NI N/A
k) Are incompatible wastes stored in separate containers (265.177(a)). If not the provisions of 265.17(b) apply. If no, explain:_____	(I)	[_]	___	NI N/A
l) Has hazardous waste been placed in unwashed containers that previously held a incompatible material? (265.177(b)) If not the provisions of 265.17(b) apply. If no, explain:_____	(I)	___	[_]	NI N/A
m) Are containers of incompatible waste separated or protected from each other by physical barriers or sufficient distance? (265.177(c))	(I)	[_]	___	NI N/A

Comments: _____

_____

_____

n) If accumulating > 1000 kg of hazardous waste(s) secondary containment been provided? (Rule 306(4)(b)(i))	(N/A)	[_]	___	NI N/A

Comments: _____

_____

_____

30. If hazardous waste is being accumulated at the point of generation:

a) Is container 55 gallons or less or 1 quart of acutely hazardous waste? (Rule 306(2): 40 CFR 262.34(c)(1))	(I)	[_]	___	NI N/A
b) Is container under control of the operator and near point of generation. (Rule 306(2): 40 CFR 262.34(c)(1))	(I)	[_]	___	NI N/A

nts: _____

_____

_____

Small Quantity Generator Inspection Form
Form A

	Violation Class	Yes	No	NI N/A
c) Are containers marked with either the words "Hazardous Waste" or with other words that identify contents of the container. (Rule 306(2): 40 CFR 262.34(c)(1)(ii))	(I)	[_]	___	NI N/A
d) Is the container marked with the hazardous waste number? (Rule 306(2))	(N/A)	[_]	___	NI N/A

Comments: _____

Rule 306(2) and 262.34(c)(1)(i) both refer to 265.171, 265.172 and 265.173(a)

e) Are containers in good condition? (265.171)	(I)	[_]	___	NI N/A
f) Are containers compatible with waste in them? (265.172)	(I)	[_]	___	NI N/A
g) Are containers stored closed when not in use and managed to prevent leaks? (265.173(a-b))	(I)	[_]	___	NI N/A

Comments: _____

.. If the generator exceeded 55 gallons or 1 quart, within 3 days did the generator: (Rule 306(2): 40 CFR 262.34(c)(2))

a) Mark the container with the date the excess amount began accumulating?	(I)	[_]	___	NI N/A
b) Move the drum to an area with secondary containment, if over 1000 kg?	(I)	[_]	___	NI N/A

TANKS (Rule 306: 40 CFR 262.34(d)(3))

. Has more than 180 (270) days elapsed since the tank was emptied? (If yes, facility is a storage facility, requirements in Part 5 of Rules.) le 306(5): 40 CFR 262.34(f)) yes, how many tanks _____?	(I)	___	[_]	NI N/A

ments: _____

	Violation Class	Yes	No	NI N/A
33. Has quantity of waste exceeded 6000 kg? (Rule 306(4)(a): 40 CFR 262.34(d)(1)) If yes the facility is a storage facility unless: (Rule 306(6): 40 CFR 262.34(f))	(I)	___	[_]	NI N/A
a) Did the facility file for and receive an extension for 30 days?	(I)	[_]	___	NI N/A
Rule 306(4)(b)(ii) & 40 CFR 262.34(d)(3) refers to 40 CFR 265.201				
34. Take precautions to prevent reactions which generate extreme heat, fire, gases, damage the facility, or other like means that threatens human health & environment. (265.17(b))	(I)	[_]	___	NI N/A
35. Was waste placed in a tank that could cause the tank or liner to rupture, leak or corrode? (265.201(b)(2))	(I)	___	[_]	NI N/A
36. Did uncovered tanks have 2 feet of freeboard, unless: (265.201(b)(3))	(I)	[_]	___	NI N/A
a) Equipped with containment structure?	(I)	[_]	___	NI N/A
b) Equipped with a drainage or diversion system?	(I)	[_]	___	NI N/A
37. If waste is continuously feed is there a feed cut-off or by-pass system? (265.201(b)(4))	(I)	[_]	___	NI N/A

Comments: _____

38. Where present, has the facility inspected at least once each operating day. (265.201(c))

a) Discharge, overflow/spill control equipment (daily). (265.201(c)(1))	(II)	[_]	___	NI N/A
b) Monitoring equipment data (daily). (265.201(c)(2))	(II)	[_]	___	NI N/A
c) Level in the tank. (265.201(c)(3))	(II)	[_]	___	NI N/A
d) Construction material of tank for corrosion or leaks. (weekly) (265.201(c)(4))	(II)	[_]	___	NI N/A

Comments: _____

	Violation Class	Yes	No	NI N/A
e) Materials and area around tank (weekly). (265.195(a)(5))	(II)	[_]	___	NI N/A
39. If the tank system was closed did the facility remove all hazardous waste from: (265.201(d))				
a) The tanks?	(I)	[_]	___	NI N/A
b) Discharge control equipment?	(I)	[_]	___	NI N/A
c) Discharge confinement structures?	(I)	[_]	___	NI N/A

Comments: _____

40. Ignitable or reactive waste must not be placed in tanks unless:

a) Treated/mixed before or immediately after placed in the tank system, so resulting mixture is no longer ignitable/reactive. (265.201(e)(1)(i))	(I)	[_]	___	NI N/A
OR				
b) Waste stored/treated so protected from igniting or reacting. (265.201(e)(1)(ii))	(I)	[_]	___	NI N/A
OR				
c) Tank system is used solely for emergency. (265.201(e)(1)(iii))	(I)	[_]	___	NI N/A

Comments: _____

41. Has the owner or operator observed the National Fire Protection Association's buffer zone requirements for tanks containing ignitable or reactive wastes? (265.201(e)(2)) — company representative said:

(I) [_] ___ NI N/A

(See tables 2-1 through 2-6 of NFPA's "Flammable and Combustible Liquids Code - 1977" to determine compliance.)

Comments: _____

42. Are incompatible wastes stored in separate tanks? (265.201(f)(1)) (If not, the provisions of 265.17(b) apply.) — company representative said:

(I) [_] ___ NI N/A

	Violation Class	Yes	No	NI N/A
13. Are tank decontaminated before hazardous waste is placed in tank that previously held incompatible waste. (265.201(f)(2))	(I)	[_]	___	NI N/A

Note: If quantity of waste in tanks exceeds 1000 kg the facility must comply with 265.191, 265.192, 265.193 and 265.196. Rule 306(4)(b)(ii).

Rule 306(4)(e) & 40 CFR 262.34(d)(4) refers to 40 CFR 265 Subpart C

PREPAREDNESS AND PREVENTION (265.30-265.37)

14. Is the facility maintained and operated to minimize the possibility of fire, explosion, or release of hazardous waste or hazardous waste constituent. (265.31)	(I)	[✓]	___	NI N/A

Comments: _____

_____

15. If required, does this facility have the following equipment:				
a) Internal communications or alarm systems. (265.32(a))	(I)	[✓]	___	NI N/A
b) Telephone or 2-way radios at the scene of operations. (265.32(b))	(I)	[✓]	___	NI N/A
c) Portable fire extinguishers, fire control, spill control equipment and decontamination equipment. (265.32(c))	(I)	[✓]	___	NI N/A
d) Adequate volume of water and/or foam available for fire control. (265.32(d))	(I)	[✓]	___	NI N/A
16. Does the owner or operator test and maintain emergency equipment to assure proper operation. (265.33)	(I)	[✓]	___	NI N/A

Comments: _____

_____

17. Has owner/operator provided immediate access to internal alarms under the following conditions: (265.34(a)&(b).				
a) When hazardous waste is being poured, mixed, etc.	(I)	[_]	___	NI N/A

	Violation Class	Yes	No	NI N/A
b) One employee on the premises while facility is operating, unless not required in 265.32.	(I)	[_]	___	NI N/A
48. Is there adequate aisle space for unobstructed movement for personnel and emergency equipment? (265.35)	(I)	[_]	___	NI N/A
49. Has the facility made arrangements with local authorities? (265.37(a)	(II)	[✓]	___	NI N/A

Comments: _____

_____

PERSONNEL TRAINING AND EMERGENCY PROCEDURES (Rule 306(4)(f-i):40 CFR 262.34(d)(5)

50. Is the emergency coordinator(s) identified & available at all times? (Rule 306(4)(f): 262.34(d)(5)(i))	(II)	[✓]	___	NI N/A

Comments: _____

_____

51. Next to a telephone is the following information available? (Rule 306(4)(g): 40 CFR 262.34(d)(5)(ii)(A-C)				
a) Name and phone number of emergency coordinator.	(II)	[✓]	___	NI N/A
b) Location of fire extinguishers, spill control equipment and if present fire alarm.	(II)	[✓]	___	NI N/A
c) Telephone number of fire department (not needed if direct alarm).	(II)	[✓]	___	NI N/A
52. Are all employees familiar with waste handling and emergency procedures relevant to their positions? (Rule 306(4)(h): 40 CFR 262.34(5)(d)(iii))	(I)	[✓]	___	NI N/A

Comments: Loss

_____

_____

		Violation Class	Yes	No	NI N/A
53.	If an emergency situation occurred, has the emergency coordinator or designee taken the appropriate response? (Rule 306(4)(i)(A) & (B): 40 CFR 262.34(d)(5)(iv)(A-B))	(I)	[_]	___	NI N/A
54.	If a fire, explosion or release which could threaten human health, or if a spill has reached a surface water has the facility immediately notified the Department through the PEAS line and the National Response Center providing the Response Center providing the required information? (Rule 306(4)(h)(i)(C)(1-5): 40 CFR 262.34(d)(5)(vi)(C)(1-5))	(I)	[_]	___	NI N/A

Comments: _____

Rule 309 refers to 262.50 - 262.58, Subpart E except 262.54 & 262.55

INTERNATIONAL SHIPMENTS (Rule 309 & 310: 40 CFR 262.50-262.60)

55.	Has the facility imported or exported hazardous waste?				
	a) Exporting hazardous waste, has the generator:				
	i) Notified the Administrator in writing? (262.52(a))	(I)	[_]	___	NI N/A
	ii) Receiving country consented to accept waste. (262.52(b))	(I)	[_]	___	NI N/A
	iii) Has copy of EPA Acknowledgment of Consent. (262.52(c))	(I)	[_]	___	NI N/A
	iv) Compiled with manifest requirements Rule in 309(2): 40 CFR 262.54.	(I)	[_]	___	NI N/A
	v) If required, was an exception report filled. Rule 309(3)(a-c): 40 CFR 262.55.	(I)	[_]	___	NI N/A
	b) Importing hazardous waste, has the generator met the manifest requirements? (Rule 310: 40 CFR 262.60)	(I)	[_]	___	NI N/A

Comments: _____

USED OIL BURNED FOR ENERGY RECOVERY INSPECTION FORM

Facility's Name Gregg Foundry Inc Dow INSPECTION FORM J

Date 12-21-93 I.D. # MID-006-131-890

NI - not inspected N/A - not applicable

Note: Used oil is defined as any oil that has been refined from crude oil, used, and, as a result of such use, is contaminated by physical or chemical impurities (266.40(b).

	Violation Class	Yes	No	NI N/A

Note: The following questions pertain to facilities regulated under Part 266, Subpart E, who are burning used oil for energy recovery.

1. Does the facility burn used oil? (266.40(a)&(b)) ✓ ___*

2. Has the facility ever burned used oil? ✓ ___*

(* If no to both do not complete the rest of the form.)

Comments: _____

3. Does the facility's burning unit(s) classify as either a boiler(s) or industrial furnace(s)? (260.10) ✓ ___
Burn unit type: (Boiler)
(If the burn unit is a boiler complete 4, if no go to 5.)

4. Does the boiler meet one of the following criteria:

a) An industrial boiler located on the site of facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes and permitted under Act 348? (266.41(b)(2)(i)) (I) [_] ___ (NI N/A)

b) A utility boiler used to produce electric power, steam, or heated or cooled air or other gases or fluids for sale and permitted under Act 348? (266.41(b)(2)(ii)) (I) [_] ___ (NI N/A)

Comments: _____

	Violation Class	Yes	No	NI N/A
c) A used oil-fired space heater meeting all of the following requirements: (266.41(b)(2)(iii)(A-C)				
i) Burns only used oil that the owner or operator generates or used oil received from do-it-yourself oil changers who generate used oil as household waste.	(I)	[✓]	___	NI N/A
ii) Designed to have a maximum capacity of not more than 0.5 million Btu per hour.	(I)	[✓]	___	NI N/A

Comments: only Burns oil Generated by Plant.

iii) Combustion gases from the heater are vented to the ambient air.	(I)	[✓]	___	NI N/A
iv) Permitted/authorized under Act 348.	(I)	[_]	___	NI N/A

Comments: Act 348 NO need as of 1993

5. Has the owner/operator notified EPA of their waste fuel activity? (266.44(b) [✓] ___ *

Note: * Burners of off-spec used oil fuel and burners of used oil fuel who are the first to claim the oil meets specification (266.40(e), except burners who burn spec oil that they generate, must notify EPA. Burners who burn specification used oil fuel received from a marketer that previously notified EPA are not required to notify.
Owners and Operators of used oil-fired space heaters meeting the requirements of 266.41(b)(2) are not required to notify.

Specify Notification Information: ~~N/A~~

Comments: _____

6. Is the used oil mixed with hazardous waste? (266.40(c)) If yes, the facility is subject to the requirements of Subpart D. Complete appropriate checklist. ___ [✓] NI N/A

Comments: _____

	Violation Class	Yes	No	NI N/A
7. Does used oil contain more than 1000 ppm of total halogens? (266.40(c))			✓ *	

(* If yes, the facility is subject to the requirements of Subpart D unless the response to 8 is yes. Complete appropriate checklist.) (If no, go to 9.)

Comments: _____

8. Has the facility rebutted the presumption by demonstrating that the used oil does not contain hazardous waste? (266.40(c))		✓	
9. Is the used oil characteristically hazardous? (266.40(d)(1))	*	✓	NI N/A
10. Is the hazardous waste contained in the waste, generated by a person subject to the requirements of 261.5? (266.40(d)(2))	*	✓	NI N/A

(* If 9 or 10 are yes, the facility is not subject to Subpart D (266.40(d))

Comments: _____

11. Does the facility burn off-specification used oil? (266.40(e))			NI N/A

Comments: _____

List Results:	Constituent/Property	Allowable level
_____	Arsenic	5 ppm max
_____	Cadmium	2 ppm max
_____	Chromium	10 ppm max
_____	Lead	100 ppm max
_____	Flash Point	100 F min
_____	Total Halogens	4000 ppm max *

* Greater than 1000 presumed hazardous unless facility demonstrated rebuttable presumption.

12. Required Notices:

a) Has the burner received off-specification used oil fuel from a marketer? (266.44(c))			NI N/A

(If yes, b.1. and b.2. must also be yes to be in compliance.)

b) Has the burner provided the marketer, before the first shipment, a one time written and signed notice certifying that:

	Violation Class	Yes	No	NI N/A
i) He has notified EPA stating the location and general description of his used oil management activities;		[_]	___	NI N/A
AND				
ii) He will burn the used oil only in an industrial furnace or boiler identified in 266.41(b).		[_]	___	NI N/A

Comments: _____

13. Is the used oil fuel burned by the generator? ___ ___ NI N/A

(If yes, the generator is not subject to the requirements of Subpart E if 14 is also yes.)

14. Are records of the analysis demonstrating that the used oil fuel meets specification (266.40(e)) maintained on-site for three years? (266.44.(d)(1) & (e)) [_] ___ NI N/A

Comments: _____

15. Is the burner treating off-specification used oil fuel by processing, blending, or other treatment to meet the specification provided under 266.40(e)? ___ ___ NI N/A

(If yes, 16 must also be yes to be in compliance.)

Comments: _____

16. If treating, are records of the analysis demonstrating that oil fuel meets specification (266.40(e)) maintained on-site for three years? (266.44(d)(2) & (e)) [_] ___ NI N/A

17. Does the facility have the required invoices for shipments of off-specification fuel received from off-site? (266.43(b)(4)) (If yes, complete 18.) [_] ___ NI N/A

Comments: _____

18. Does the facility keep the invoices for three years from the date the invoice was received? (266.44(e)) [_] ___ NI N/A

Comments: _____

	Violation Class	Yes	No	NI N/A
19. Do the invoices contain the following: (266.43(b)(4))				
a) Invoice Number?		[_]	___*	NI N/A
b) Marketer EPA Identification Number?		[_]	___*	NI N/A
c) Receiving Facility Identification Number?		[_]	___*	NI N/A
d) Marketer name and address?		[_]	___*	NI N/A
e) Receiver name and address?		[_]	___*	NI N/A
f) The quantity of off-specification used oil delivered?		[_]	___*	NI N/A
g) The date of shipment or delivery?		[_]	___*	NI N/A
h) The following statement: "This used oil is subject to EPA regulation under 40 CFR Part 266".		[_]	___*	NI N/A

(* If there are elements of the invoice missing it is a violation of the marketer not the burner. The marketer and burner might be the same or a different facility.)

Comments: _____

ORIG: FIN FILE
cc: Hank Switzer

RECEIVED
OCT - 1993
Waste Management Division

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES
WASTE MANAGEMENT DIVISION

DNR

POLLUTION LIABILITY INSURANCE

(Sudden and Accidental)

HAZARDOUS WASTE MANAGEMENT FACILITY LIABILITY AMENDATORY ENDORSEMENT

(MICHIGAN)

This endorsement changes the policy effective on the inception date of the policy or as of the date indicated below. Attachment of this endorsement to the pollution liability policy will fulfill the insurance requirements of the State of Michigan Act 64, P.A. 1979, as amended (Hazardous Waste Management Act) and Administrative Rule R 299.9710 of the Michigan Administrative Code.

Insurer: National Union Fire Ins. Co. of Pittsburgh, PA

Insurer's Address: 500 W. Madison St. #1000, Chicago, IL 60661-2511

Policy Number: PLL7631923

Insured: Grede Foundries, Inc.
Grede Foundries Co., Inc.

Insured's Address: P.O. Box 26499, Milwaukee, WI 53226

Date Effective: 10-7-93

Policy Period From: 10-7-93 To: 10-7-94

Name, Address, and EPA I.D. No. of Facility(ies) Covered:

Grede Foundries Co., Inc.
801 South Carpenter Ave.
Kingsford, MI 49801
MID-006-131-890

The Insurer hereby certifies that it has issued the Insured the policy of insurance identified above to provide financial assurance and responsibility for bodily injury and property damage to third parties caused by sudden and accidental occurrences arising from operation of the facility(ies) identified above.

The insurance afforded with respect to sudden and accidental occurrences is subject to all of the terms and conditions of the policy provided however that any provision of the policy inconsistent with Sections A through E of this form are hereby amended to conform with Sections A through E.

A. Limits of liability as respects bodily injury and property damage are provided in the amount of:

$ 3,000,000 Per Occurrence $ 6,000,000 Annual Aggregate

The following deductible per occurrence applies: (if none, so state) $ 500,000

B. Legal defense costs are covered *in addition to* the stated limit(s) of liability in this policy.

C. No exclusion of liability coverage relating to pollutants, contaminants or irritants applies if an occurrence is sudden and accidental.

D. The Insurer will provide the Waste Management Division, Department of Natural Resources, P.O. Box 30241, Lansing, MI 48909 with at least thirty (30) days written notice of cancellation, termination, or material change to this policy which affects the coverages required by R 299.9710. Such notices shall be given no matter which party initiates the cancellation, termination, or material change and whether or not nonpayment of premium is involved.

E. The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the Insured for any such payment made by the Insurer.

I hereby certify that the wording of this endorsement is identical to the wording provided by the Director on the date above written, and that the Insurer is licensed to transact the business of insurance, or is eligible to provide insurance as an excess or surplus lines insurer, in the State of Michigan.

Signature of Authorized Agent: William L. Milkent Date: 9-29-93

Name of Agent or Broker: Alexander & Alexander

Street and Number: 100 E. Wisconsin Ave., S#1750

City, State, and Zip Code: Milwaukee, WI 53202

Filing of this endorsement is required by law (MAC R 299.9710).

MAIL TO:
Waste Management Division
Hazardous Waste Permits Section
Department of Natural Resources
P.O. Box 30241
Lansing, MI 48909

PR 5103.1 Rev. 9/89

STATE OF MICHIGAN

JOHN ENGLER, Governor

DEPARTMENT OF NATURAL RESOURCES

ROLAND HARMES, Director

Regional Headquarters
1990 U.S. 41 South
Marquette, Michigan 49855

August 9, 1993

Mr. Ronald Olson
Grede Foundries
801 S. Carpenter Avenue
Kingsford, Michigan 49801-5594

Dear Mr. Olson:

SUBJECT: TET Monitoring Program

The Department concurs with your request to change the monthly monitoring program for cadmium, and lead quarters with the following stipulations:

Grede shall determine the mean plus three standard deviations of all the TCLP data collected to date. It is agreed to allow Grede to sample quarterly and analyze using only the TCLP test as long as the results of each quarterly sampling event are within the established mean plus three standard deviations which has been established.

If a quarterly analytical result is outside this range, Grede will have to begin sampling the material on a monthly basis for the next three months. If the results of all three monthly samples have dropped back into the mean plus three standard deviations range for the particular parameter of concern (either lead or cadmium), Grede may switch back to a quarterly sampling program. If the three monthly results continue to show that the treated material is out of the established concentration range, Grede shall submitted a written notice to WMD, Marquette Office, and continuing sampling monthly for the next 12 months.

After every year of monthly or quarterly sampling, Grede shall add these results to the established data base and recalculate the mean plus three standard deviations for lead and cadmium for future comparisons.

If you have any questions regarding this, please contact me.

Sincerely,

Robert Schmeling II

Robert Schmeling II
Regional Supervisor
Waste Management Division
906/228-6561

RS:1SWITZER:ksf

MICHIG) DEPARTMENT OF NATURAL R)OURCES

INTEROFFICE COMMUNICATION

July 23, 1993

TO: Margie Ring, Marquette District Office, WMD

FROM: Jan Sealock, Environmental Quality Analyst, WMD

SUBJECT: Grede Foundries, Inc.
Results of TET Monitoring Program
MID 006 131 890

I have reviewed the results of the TET Monitoring Program at Grede Foundries, Inc. of Kingsford, Michigan. Grede has proposed to change the current monthly monitoring program for cadmium and lead to a quarterly program. They have also proposed to use either TCLP or the EP Tox methodology instead of both for analysis of the parameters. I have discussed these proposals with Kim Paksi and the following monitoring program can be approved.

Grede will need to determine the mean plus three standard deviations of all the TCLP data collected to this point. It has been agreed to allow the facility to sample quarterly and analyze using only the TCLP test as long as the results of each quarterly sampling event are within the established mean plus three standard deviations which has been established.

If a quarterly analytical result is outside this range, the company will have to begin sampling the material on a monthly basis for the next three months. If the results of all three monthly samples have dropped back into the mean plus three standard deviations range for the particular parameter of concern (either lead or cadmium), the company may switch back to a quarterly sampling program. If the three monthly results continue to show that the treated material is out of the established concentration range, Grede must continue sampling monthly for one year.

After every year of monthly or quarterly sampling, Grede will need to add these results to the established data base and recalculate the mean plus three standard deviations for lead and cadmium for future comparisons.

If you have any questions regarding this proposal, please contact me at 517-373-4740.

cc: Ms. Kim Paksi, DNR
Ms. De Montgomery, DNR
HWP/C&E File

Jan Sealock

GREDE FOUNDRIES, INC.

IRON MOUNTAIN FOUNDRY
801 SOUTH CARPENTER AVENUE
KINGSFORD, MI 49801
TELEPHONE (906) 774-7250

12-July-93

Mr. Robert Schmeling
Michigan Department of Natural Resources
1990 U.S. 41 South
Marquette, Michigan 49855

Dear Sir:

During the 2nd Quarter of 1993 Grede Foundries, Inc. (Iron Mountain Division), put 70.3 tons of waste oil cores through our VM-27 Vibra-Mill. This report is being submitted to the Michigan Department of Natural Resources per the consent judgment of 9-May-1990.

The actual savings of the above thru put of waste oil cores consisted of:

1.) Disposal costs not incurred	$ 1,757.50 (A)	$25.00
2.) Purchase of new sand not required	$ 2,731.15 (A)	$38.85
Total Savings	$ 4,488.65	

If you have any questions on this report, I can be contacted at (906) 774-7250 ext. 265 during normal working hours.

Sincerely,

Grede Foundries, Inc.
Iron Mountain Div.

Ronald L. Olson
Plant Eng. Mgr.

VIEW THE NOTE E01

From: SLIVERS --DNRDC Date and time 06/18/93 08:50:54
: SWITZERL--DNRDC

*** Reply to note of 06/17/93 11:35
From: Steve Sliver
Subject: Grede
I think the review of any monitoring should be done by Jan Sealock and district staff.

cc: SEALOCKJ--DNRDC SCHRANTP--DNRDC

E N D O F N O T E

PF1 Alternate PFs PF2 File NOTE PF3 Keep PF4 Erase PF5 Forward Note
PF6 Reply PF7 Resend PF8 Print PF9 Help PF10 Next PF11 Previous PF12 Return
o-o001
4B~ a

SEND A NOTE E04

ıd to: Slivers
_om: Hank Switzer, Marquette District Office
Waste Management Division
Subject: Grede

Tried to call but as cut off so I decided to profs you!!

STS Consultants submitted a TET Monitoring Program for 1992-93 for Grede (June 9, 1993) to Schmeling. They are also requesting that the monitoring program be reduced to quarterly sampling and analysis for 1993-94. Who should review this (District or Hazardous Waste Permit Unit)????

.cc Schmelir

PF1 Top PF2 Bottom PF3 Erase Line PF4 Add Line PF5 Nulls Off PF6 Format
PF7 Send PF8 Proofread PF9 Help PF10 Next PF11 Previous PF12 Cancel
4B~ a o-o001

BS-

Janet Sealock called 6/17/93 -
She is reviewing this & will respond to Grede next to week.

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING
P.O. BOX 30028
LANSING, MI 48909

DAVID F. HALES, Director

August 7, 1990

James O. White
Director of Engineering
Grede Foundries, Incorporated
P.O. Box 26499
9898 West Bluemound Road
Milwaukee, Wisconsin 53226-0499

Dear Mr. White:

SUBJECT: Grede Foundries, Iron Mountain Foundry, Kingsford, Michigan
MID 006 131 890: Status of MDNR Review of Draft Submittals

This is to follow up our recent telephone conversations regarding the status of the Michigan Department of Natural Resources (MDNR) Waste Management Division (WMD) staff's review of the initial draft proposals recently submitted on Grede's behalf by STS.

In our meeting of June 6, 1990, Grede agreed to submit various plans and documents by particular deadlines. Further, in response to Grede's concerns regarding the adequacy of technical proposals, the MDNR agreed to provide Grede with one informal review of draft proposals with the stated expectation that the subsequent final versions of those proposals would be approvable as submitted.

Grede was to submit appropriate financial assurance to the DNR by July 6, 1990. I have been informed by Mr. James Roberts of WMD's Hazardous Waste Permits Section that this requirement has been met. Grede also agreed to submit a revised Closure Plan for the existing hazardous waste treatment operations and a Sampling and Analysis Plan for the proposed Totally Enclosed Treatment exemption. These submittals were to be made by August 6, 1990, and draft submittals of each plan have been received. Thus, Grede has met the deadlines agreed to during the meeting.

I have been informed by Mr. Roberts that, due to workload considerations, the review of the draft Closure Plan and the draft Sampling and Analysis Plan will require some additional time to complete. Mr. Roberts has indicated that the review of those draft plans will be completed by September 17, 1990.

WMD staff have completed their review of the draft Type III Landfill Waste Characterization Work Plan submitted by Grede on July 23, 1990, and the following comments are provided:

1. The workplan refers to "existing fill material", "native fill material", "soil", and "waste" in its discussion of the proposed sampling. This inconsistent nomenclature gives rise to confusion with regard to how many samples of what materials are to be analyzed. The workplan must clearly provide for the initial analysis of at least 20 randomly selected samples of waste material and at least four randomly selected samples of the soil beneath the waste material. Please make the necessary changes to clarify this aspect of the workplan. Based on the statistical evaluation of waste characterization data obtained by these analyses, further analyses may be required as provided in the workplan.

2. All samples collected but not chosen for analysis must be stored properly at 4^{0}C in the event that further analyses are required. Please include this in the workplan.

3. The workplan proposes the analysis of all samples using the TCLP extraction procedure. While this procedure can be used to evaluate waste type under Act 641, the TCLP procedure has not been adopted in Act 64. Accordingly, Grede should provide for the performance of both E.P. Tox and TCLP analyses to assure adequate characterization of the materials sampled.

Finally, a draft Consent Judgement to embody an appropriate and enforceable resolution of the various outstanding issues related to the Type III landfill, hazardous waste management, and the existing litigation is under development and will be provided to Grede when complete. In the meantime, I encourage Grede to continue to communicate closely with appropriate DNR staff so that we may resolve as many of the technical issues as possible.

While much remains to be accomplished, I am gratified by Grede's cooperation in this matter to date and look forward to its appropriate resolution. If you have any questions or concerns please call me at 517-335-4709.

Sincerely,

Philip L. Schrantz
Compliance and Enforcement Section
Waste Management Division

cc: Mr. Gary Hicks, AAG
Mr. Dennis Drake/Ms. Deb Mulcahey, DNR
Mr. Steve Buda, DNR
Ms. De Montgomery, DNR
Ms. Joan Peck, DNR
Mr. Jim Roberts, DNR

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

Marquette, Michigan
July 25, 1990

To: Robert Schmeling, Regional Supervisor, WMD

From: Margie Ring, Engineer, WMD
Hank Switzer, Environmental Engineer, WMD

Subject: Solid Waste Characterization Work Plan, Type III Landfill, Grede Foundries, Inc., Kingsford, Dickinson County

We have reviewed the above referenced submittal and we have the following comments and concerns:

1. STS proposes sampling on a 100 x 100 foot grid spacing, resulting in 13 borings in the 2.8 acre site. Samples 1.5 feet in length will be collected on two foot spacing. Twenty samples will be randomly selected for analysis. A statistical evaluation of the samples will be performed using the t-distribution. This statistical test should be evaluated by the Geotechnical Unit to ensure the test statistic is appropriate, and that an adequate number of samples will be used.

2. STS proposes to analyze the samples using the TCLP extraction procedure. Grede will using the test results to determine whether the landfill contains hazardous or type II waste. TCLP might be an acceptable substitute if only the type II-type III differentiation was required, however, it cannot be used to determine if this is a hazardous waste. The EP tox test must be used until the Act 64 rules are changed. Also, the EP tox test can only be used to detect heavy metals, it cannot be used to detect the additional organics that STS proposes testing for. We should require that both tests be performed if will be requiring Grede to sample for all the parameters listed.

3. The sampling and handling protocols appear to be acceptable.

GREDE FOUNDRIES, INC.

GENERAL OFFICES
P. O. BOX 26499
MILWAUKEE, WISCONSIN 53226-0499
TELEPHONE (414) 257-3600

GRAY IRON
IRON MOUNTAIN FOUNDRY - KINGSFORD, MICHIGAN
ROBERTS FOUNDRY CO., INC. - GREENWOOD, SOUTH CAROLINA
GREDE PERM CAST, INC. - CYNTHIANA, KENTUCKY
GREDE-VASSAR, INC - VASSAR, MICHIGAN
DUCTILE IRON
LIBERTY FOUNDRY - WAUWATOSA, WISCONSIN
REEDSBURG FOUNDRY - REEDSBURG, WISCONSIN
WICHITA FOUNDRY - WICHITA, KANSAS
GREDE NEW CASTLE, INC. - NEW CASTLE, INDIANA
STEEL
MILWAUKEE STEEL FOUNDRY - MILWAUKEE, WISCONSIN
SPECIAL SERVICES
SHORT RUN SPECIALTY FOUNDRY - MILWAUKEE, WISCONSIN
FREDONIA FOUNDRY, INC. - FREDONIA, WISCONSIN

July 20, 1990

Mr. Philip Schrantz
Michigan Department of Natural Resources
Compliance and Enforcement Division
Stevens T. Mason Building
Post Office Box 30028
Lansing, MI 48909

Dear Mr. Schrantz:

Subject: Grede Foundries, Inc., Iron Mountain Facility
Kingsford, Michigan
MID 006 131 890

This is the third progress report regarding the resolution of outstanding environmental and legal issues associated with Grede's Kingsford, Michigan, foundry.

With regard to Act 641:

1. Per our previous commitment, we ceased all waste additions to the unlicensed landfill as of July 1, 1990.

2. All nonhazardous foundry waste is now being disposed at Michigan Environs.

3. The work plan to study the contents of the Type III landfill has been completed. The plan, in "DRAFT" form, has been submitted to you and Rob Schmeling for comments. The official submittal of the plan will be made immediately upon resolution of any comments you or Rob may have.

4. The waste characterization program development is progressing well.

With regard to Act 64:

1. The hazardous waste treatment facility Closure Plan should be in "DRAFT" form by July 24. We hope to have a draft copy to both you and Jim Roberts by July 27. Here again, we will solicit your comments prior to the "official" submittal of the document.

2. The "DRAFT" of the required Sampling and Analysis Plan for the TET process should be completed by July 26. Draft copies will be submitted for comments.

We appreciate your assistance in our efforts to provide the required documents, in a technically correct and complete form, prior to the August 6, 1990, deadline. We will continue to keep you informed of our progress both verbally and with regular written progress reports.

Please call me at (414) 257-3600, Ext. 321, if you have any questions and/or comments.

Sincerely,

GREDE FOUNDRIES, INC.

James O. White

James O. White
Director of Engineering

JOW:jkf

cc: Rob Schmeling - MDNR
James Roberts - MDNR
B. E. Jacobs - Grede
Bruce Jacobs - Grede
Norm Goller - Grede
Dennis Bergeron - Grede
Ron Olson - Grede
Walter Davis - Davis & Kuelthau
Peter Ruud - Davis & Kuelthau
Bill Callahan - Davis & Kuelthau
Jim Botz - STS Consultants

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

Marquette, Michigan
July 25, 1990

To: Robert Schmeling II, Regional Supervisor, WMD

From: Margie Ring, Engineer, WMD
Hank Switzer, Environmental Engineer, WMD

Subject: Solid Waste Characterization Work Plan, Type III Landfill, Grede Foundries, Inc., Kingsford, Dickinson County

We have reviewed the above referenced submittal and we have the following comments and concerns.

1. STS proposes sampling on a 100 x 100 ft grid spacing, resulting in 13 borings in the 2.8 acre site. Samples 1.5 feet in length will be collected on two foot spacing. Twenty samples will be randomly selected for analysis. A statistical evaluation of the samples will be performed using the t-distribution. This statistical test should be evaluated by the Geotechnical Unit to ensure the test statistic is appropriate, and that an adequate number of samples will be used.

2. The samples will be analyzed using the TCLP extraction procedure. The Waste Characterization Unit should be contacted to determine whether this is an acceptable test procedure. If Grede is using the test results to determine whether this is a hazardous waste, they will have to use the EP tox test. TCLP is acceptable for determining the type III - type II designation. Since they will be trying to show both non-hazardous character and that this is a type III waste, we will have to require that the EP tox test be used (at least until September.)

3. The actual sampling and handling procedures appear to be acceptable. Also, the parameters to be sampled for are adequate.

GREDE FOUNDRIES, INC.

GENERAL OFFICES
P.O. BOX 26499
MILWAUKEE, WISCONSIN 53226-0499
TELEPHONE (414) 257-3600

GRAY IRON
IRON MOUNTAIN FOUNDRY - KINGSFORD, MICHIGAN
ROBERTS FOUNDRY CO., INC. - GREENWOOD, SOUTH CAROLINA
GREDE PERM CAST, INC. - CYNTHIANA, KENTUCKY
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MILWAUKEE STEEL FOUNDRY - MILWAUKEE, WISCONSIN
SPECIAL SERVICES
SHORT RUN SPECIALTY FOUNDRY - MILWAUKEE, WISCONSIN
FREDONIA FOUNDRY, INC. - FREDONIA, WISCONSIN

June 22, 1990

Mr. Philip Schrantz
Michigan Department of Natural Resources
Compliance and Enforcement Division
Stevens T. Mason Building
Post Office Box 30028
Lansing, MI 48909

Dear Mr. Schrantz:

SUBJECT: Grede Foundries, Inc., Iron Mountain Facility, Kingsford. Michigan, MID 006 131 890

This is the first progress report subsequent to the June 6, 1990, meeting regarding the resolution of outstanding environmental and legal issues, associated with Grede's Kingsford, Michigan foundry.

With regard to Act 641, Grede has taken the following actions:

1. Grede has contacted Michigan Environs and we are finalizing arrangements for Michigan Environs to receive all nonhazardous solid waste generated at the Kingsford facility.

2. Grede is obtaining bids and finalizing arrangements for the transportation of the additional waste volume to Michigan Environs.

3. To facilitate collection and efficient handling of the additional waste volume to be sent to Michigan Environs, it was determined that a sand mixing and waste staging area would be beneficial. After verbal discussions with the Department, plans were developed and submitted for review. The Department issued a verbal approval on June 19, 1990. Construction began on June 21, 1990.

4. Pending the successful completion of Items 1, 2, and 3, Grede plans to stop all waste additions to the unlicensed landfill effective July 1, 1990.

5. Grede has enlisted the services of STS Consultants to develop the required work plan to study the contents of the Type III landfill. STS is actively working on this task.

6. STS is also developing the required waste characterization program to verify the various waste materials generated at the foundry.

7. Cory Labs has been contacted to discuss possible involvement in the waste analysis activities that will be required.

With regard to Act 64, Grede has taken the following actions:

1. Financial Assurance documents have been modified as required and submitted to the Department. Jim Roberts verbally confirmed acceptance on June 19, 1990.

2. STS Consultants are actively working on the required closure plan for this hazardous waste treatment process.

It is Grede Foundries' sincere desire to be in full compliance with all regulations and to respond in a timely manner to all requirements and requests. We look forward to working with the Department to resolve these issues. We will continue to keep you informed of our progress.

Please call is you have any questions and/or comments.

Sincerely,

GREDE FOUNDRIES, INC.

James O. White

James O. White
Director of Engineering
(414) 257-3600, Ext. 321

JOW:gz

cc: Rob Schmelling, MDNR
James Roberts, MDNR
B. E. Jacobs, Grede
Bruce Jacobs, Grede
Norm Goller, Grede
Dennis Bergeron, Grede
Ron Olson, Grede
Walter Davis, Davis and Kuelthau
Peter Ruud, Davis and Kuelthau
Bill Callahan, Davis and Kuelthau
Jim Botz, STS Consultants

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING
P.O. BOX 30028
LANSING, MI 48909

DAVID F. HALES, Director

June 14, 1990

Mr. N. J. Goller, Vice President
Chief Financial Officer
Grede Foundries, Incorporated
P.O. Box 26499
9898 West Bluemound Road
Milwaukee, Wisconsin 53226-0499

Dear Mr. Goller:

SUBJECT: Grede Foundries, Iron Mountain Facility, Kingsford, Michigan
MID 006 131 890

This is to follow up our meeting of June 6, 1990 regarding the resolution of outstanding environmental and legal issues associated with Grede's Kingsford, Michigan foundry.

The Department has previously informed Grede of the numerous violations of the Michigan Hazardous Waste Management Act, 1979 PA 64, as amended (Act 64), the Michigan Solid Waste Management Act, 1978 PA 641, as amended (Act 641), and the rules promulgated under these acts which must be appropriately resolved.

With regard to Act 64, Department staff have previously notified Grede that it had: failed to comply with closure plan requirements; failed to provide adequate financial assurance for closure and liability; and failed to have developed an adequate waste analysis plan. As indicated during the meeting, Grede has recently submitted a waste analysis plan which Waste Management Division Marquette District staff have informed me is adequate. However, issues regarding the facility's closure plan and financial assurance mechanisms still remain.

The one-page closure plan recently provided by Grede is inadequate for numerous reasons, most notably in that it seems to provide for the closure of the generating process itself and not the actual hazardous waste treatment process. Please find enclosed a copy of a recently approved closure plan and related correspondence which Grede should use as an example in developing an appropriate closure plan for its hazardous waste treatment operations. Grede has agreed to submit a revised closure plan by August 6, 1990.

The continuing inadequacy of the financial assurance mechanisms that Grede has provided to the Department was discussed. As agreed during our meeting, Grede must provide the necessary financial assurance using the appropriate forms as required by the Department by July 6, 1990. Recent conversations with Mr. Steve Sliver of the Waste Management Division's Hazardous Waste Permits Section have revealed that Mr. Sliver has been in direct contact with Mr. Ertel of your staff and Mr. Milkent, an insurance representative with Alexander and Alexander. On June 5, 1990, Mr. Sliver discussed liability coverage issues with Mr. Ertel and Mr. Milkent and telefaxed Mr. Milkent example forms for pollution liability insurance. According to Mr. Sliver, Grede Foundries has indicated a desire to develop a corporate guarantee and financial test for some portion of its overall financial assurance obligations. Accordingly, please find enclosed amendatory endorsement forms for pollution, liability insurance as well as examples of corporate guarantee and financial test documentation for Grede's use in providing appropriate financial assurances as required by Act 64 and RCRA.

Department staff pointed out that Grede's desire to obtain a Totally Enclosed Treatment (TET) exemption for its foundry operations (presumably by the installation of the "Furness process" in the foundry emissions control system) is an unresolved issue that must be resolved in the near future. The Department will afford Grede one more opportunity to submit all of the information necessary for the agency to make a determination as to whether the proposed modifications to your manufacturing process will qualify for a TET exemption. If the TET exemption cannot be obtained, Grede must submit either an application for an Act 64 operating license for the hazardous waste treatment process, or alternatively, close the hazardous waste treatment process pursuant to an approved closure plan. Grede has agreed to provide the information necessary to the Department by August 6, 1990. Enclosed is a copy of Mr. James Roberts' June 27, 1989 letter to Mr. VanDyke detailing additional information required by the Department. Grede is encouraged to work directly with Mr. Roberts and Marquette District staff to assure that the Closure Plan, TET exemption, and financial assurance submittals are acceptable.

With regard to the outstanding Act 641 issues, the Department has sufficient reason to believe that Type II and potentially hazardous wastes have been historically disposed of in Grede's captive Type III landfill. Before any relicensure of this facility or a similar facility at Grede Foundries can be considered, the following issues must be dealt with.

First, Grede must submit a workplan to the Department for a study of the Type III landfill. The purpose of this study would be to ascertain the presence and amount of any Type II or hazardous wastes in the facility. The Department believes that such a study can be accomplished by a series of vertical borings through the fill material extending some distance into the underlying native soils with a collection of samples at appropriate intervals throughout each boring. The samples must be analyzed for all parameters of concern including heavy metals and a determination made as to the nature and extent of any Type

II or hazardous wastes found to be in the landfill. In the event that hazardous wastes are identified in Grede's landfill, these wastes must be removed and properly disposed of as hazardous wastes.

If the study identifies the presence of Type II waste, then some options may exist. Grede may want to evaluate the possibility of performing an accelerated closure of the Type III landfill by the installation of an enhanced cap on the facility. In the event that this approach is taken, the Department would also expect Grede to propose an enhanced groundwater monitoring system for the closed facility to assure the detection of any impact on the resources of the State resulting from this facility. As a second alternative, Grede may want to investigate the possibility of obtaining a construction permit and subsequently an operating license for a Type II solid waste disposal area on the property. After the construction and licensure of this facility, the wastes in the old Type III landfill could then be removed to the Type II landfill and the old landfill area subsequently used for further development of Type II disposal capacity. Clearly other options may exist and selection of these options will necessarily be based to some degree upon the results of the study. In any event, the Department will also expect Grede to upgrade its existing Act 641 financial assurance for the landfill to the current landfill bonding standards of $20,000.00 per acre.

Finally, Grede must provide the agency with an adequate waste characterization program. The purpose of this program has already been discussed. The waste characterization program must allow Grede to verify the type of waste materials generated at the Kingsford facility. As was discussed, this waste characterization program is, to a degree, related to the waste analysis plan required by Act 64 but extends to all of the waste streams which Grede would dispose of in a solid waste disposal facility.

As indicated during the meeting, Grede has been operating its landfill without a valid solid waste disposal area license for approximately two years. Under Act 641, Grede is therefore subject to penalties of up to $10,000.00 per day per violation for violations of Act 641. Further, Grede's violations of Act 64 subject it to penalties up to $25,000.00 per day per violation pursuant to Act 64 and RCRA. The Department expects that any resolution of the outstanding issues will involve the payment of a substantial penalty. With regard to the ultimate relicensure of Grede's Type III landfill or licensure of some other solid waste disposal facility at Grede, the Department's position is that the outstanding issues associated with this facility must be resolved before the Department will consider the evaluation and possible issuance of any license.

The foregoing outlines what the Department feels are the appropriate means of resolving these issues. We propose that resolution of these issues be specified in a draft Consent Judgment which would serve as the mechanism for settlement of the existing litigation and to provide enforceable schedules for the performance of these activities. If Grede concurs with this approach, the agency is prepared to develop and submit such a draft Consent Judgment which

would hopefully serve as the basis for the negotiation and subsequent resolution of these matters. Please note that any settlement of the pending litigation will require the approval of the Attorney General.

I look forward to your response. If you or your staff have any questions, please contact me at 517-335-4709.

Sincerely,

Philip L. Schrantz
Compliance and Enforcement Section
Waste Management Division

PS:ss
Enclosures
cc: Mr. Ron Olson, Grede Foundries, w/enclosures
Mr. William Callahan, Davis and Kuelthau, S.C., w/enclosures
Mr. Russell W. Hall, w/enclosures
Mr. James Botz, P.E., STS, w/enclosures
Mr. Gary Hicks, AAG, w/enclosures
Mr. Dennis Drake/Ms. Deb Mulcahey, DNR, w/o enclosures
Mr. Rob Schmeling, DNR, w/o enclosures
Mr. Steve Buda, DNR, w/o enclosures
Mr. James Roberts, DNR, w/o enclosures
Mr. Hank Switzer, DNR, w/o enclosures
Ms. Margie Ring, DNR, w/o enclosures
Mr. Steve Sliver, DNR, w/o enclosures

Telephone 414 271-2000
Telefax 414 271-0769
&Alexander
of Wisconsin

June 8, 1990

Steven R. Sliver
Waste Management Division
Hazardous Waste Permits Section
Department of Natural Resources
P.O. Box 30241
Lansing, MI 48909

Re: Grede Foundries, Inc., Kingsford, MI
Grede Foundries, Inc., Vasser, MI

Dear Steve:

Per our telephone conversation I am enclosing the fully executed amendatory endorsements for both of the above locations. Please note I have filed two for each. One is for the sudden and accidental coverage while the other is for non-sudden accidental. I sincerely appreciate your patience in this matter.

Should any questions or concerns arise please feel free to call me direct.

Sincerely,

William L. Milkent
Account Executive

WLM/md

Enclosures

cc: Gary Ertel - Grede Foundries
Matthew Henry - AIG

RECEIVED
JUN 18 1990
Marquette Dist. W.M.D.

RECEIVED
JUN 11 1990
Waste Management
Division

MAIL TO:
Waste Management Division
Hazardous Waste Permits Section
Department of Natural Resources
P.O. Box 30241
Lansing, MI 48909

Name of Agent or Broker

411 E. Wisconsin Ave., S#2050
Street and Number
Milwaukee, WI 53202
City, State, and Zip Code

PR 5103-1 Rev. 9/89

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES
WASTE MANAGEMENT DIVISION

POLLUTION LIABILITY INSURANCE

(Nonsudden Accidental)

HAZARDOUS WASTE MANAGEMENT LIABILITY AMENDATORY ENDORSEMENT (MICHIGAN)

This endorsement changes the policy effective on the inception date of the policy or as of the date indicated below. Attachment of this endorsement to the pollution liability policy will fulfill the insurance requirements of the State of Michigan Act 64, P.A. 1979, as amended (Hazardous Waste Management Act) and Administrative Rule R 299.9710 of the Michigan Administrative Code.

Insurer: National Union Fire Ins. Co.
500 W. Madison St.
Insurer's Address: Chicago, IL 60606

Date Effective: 10/7/89

Policy Period From: 10/7/89 To: 10/7/90

Policy Number: PLL-7166356

Insured: Grede Foundries, Inc., Grede Vassar, Inc.
P.O. Box 26499
Insured's Address: Milwaukee, WI 53226

Name, Address, and EPA I.D. No. of Facility(ies) Covered

Grede Foundries, Inc., Grede Vassar, Inc.
700 Huron St.
Vassar, MI 48768
MID005513262

The Insurer hereby certifies that it has issued the Insured the policy of insurance identified above to provide financial assurance and responsibility for bodily injury and property damage to third parties caused by nonsudden accidental occurrences arising from operation of the facility(ies) identified above.

The insurance afforded with respect to nonsudden accidental occurrences is subject to all of the terms and conditions of the policy provided however that any provision of the policy inconsistent with Sections A through E of this form are hereby amended to conform with Sections A through E.

A. Limits of liability as respects bodily injury and property damage are provided in the amount of:

$ 4,000,000 Per Occurrence $ 8,000,000 Annual Aggregate

The following deductible per occurrence applies (if none, so state) $ 250,000.

B. Legal defense costs are covered **in addition** to the stated limit(s) of liability in this policy.

C. No exclusion of liability coverage relating to pollutants, contaminants, or irritants applies if an occurrence is a nonsudden accidental occurrence.

D. The Insurer will provide the Waste Management Division, Department of Natural Resources, P.O. Box 30241, Lansing, MI 48909 with at least thirty (30) days written notice of cancellation, termination, or material change to this policy which affects the coverages required by R 299.9710. Such notices shall be given no matter which party initiates the cancellation, termination, or material change and whether or not nonpayment of premium is involved.

E. The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the Insured for any such payment made by the Insurer.

I hereby certify that the wording of this endorsement is identical to the wording provided by the Director on the date above written, and that the Insurer is licensed to transact the business of insurance, or is eligible to provide insurance as an excess or surplus lines insurer, in the State of Michigan.

Filing of this endorsement is required by law (MAC R 299.9710)

Signature of Authorized Agent — Date: 6/8/90

Alexander and Alexander
Name of Agent or Broker

411 E. Wisconsin Ave., S#2050
Street and Number

Milwaukee, WI 53202
City, State, and Zip Code

MAIL TO:
Waste Management Division
Hazardous Waste Permits Section
Department of Natural Resources
P.O. Box 30241
Lansing, MI 48909

PR 5103-2
Rev. 11/89

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES
WASTE MANAGEMENT DIVISION

POLLUTION LIABILITY INSURANCE

(Sudden and Accidental)
HAZARDOUS WASTE MANAGEMENT FACILITY LIABILITY AMENDATORY ENDORSEMENT
(MICHIGAN)

This endorsement changes the policy effective on the inception date of the policy or as of the date indicated below. Attachment of this endorsement to the pollution liability policy will fulfill the insurance requirements of the State of Michigan Act 64, P.A. 1979, as amended (Hazardous Waste Management Act) and Administrative Rule R 299.9710 of the Michigan Administrative Code.

Insurer: National Union Fire Ins. Co.
Insurer's Address: 500 W. Madison St. Chicago, IL 60606

Date Effective: March 5, 1990
Policy Period From: 10/7/89 To: 10/7/90

Policy Number: PLL-7166356

Insured: Grede Foundries; Inc.
Insured's Address: P.O. Box 26499 Milwaukee, WI 53026

Name, Address, and EPA I.D. No. of Facility(ies) Covered:
Grede Foundries, Inc.
801 South Carpenter Ave.
Kingsford, MI 49801
MID006131890

The Insurer hereby certifies that it has issued the Insured the policy of insurance identified above to provide financial assurance and responsibility for bodily injury and property damage to third parties caused by sudden and accidental occurrences arising from operation of the facility(ies) identified above.

The insurance afforded with respect to sudden and accidental occurrences is subject to all of the terms and conditions f the policy provided however that any provision of the policy inconsistent with Sections A through E of this form are hereby amended to conform with Sections A through E.

A. Limits of liability as respects bodily injury and property damage are provided in the amount of:

$ 4,000,000 Per Occurrence $ 8,000,000 Annual Aggregate

The following deductible per occurrence applies: (if none, so state) $ 250,000

B. Legal defense costs are covered *in addition to* the stated limit(s) of liability in this policy.
C. No exclusion of liability coverage relating to pollutants, contaminants or irritants applies if an occurrence is sudden and accidental.
D. The Insurer will provide the Waste Management Division, Department of Natural Resources, P.O. Box 30241, Lansing, MI 48909 with at least thirty (30) days written notice of cancellation, termination, or material change to this policy which affects the coverages required by R 299.9710. Such notices shall be given no matter which party initiates the cancellation, termination, or material change and whether or not nonpayment of premium is involved.
E. The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the Insured for any such payment made by the Insurer.

I hereby certify that the wording of this endorsement is identical to the wording provided by the Director on the date above written, and that the Insurer is licensed to transact the business of insurance, or is eligible to provide insurance as an excess or surplus lines insurer, in the State of Michigan.

Filing of this endorsement is required by law (MAC R 299.9710).

Signature of Authorized Agent — Date: 6/8/90

Alexander & Alexander
Name of Agent or Broker

411 E. Wisconsin Ave., S#2050
Street and Number

Milwaukee, WI 53202
City, State, and Zip Code

MAIL TO:
Waste Management Division
Hazardous Waste Permits Section
Department of Natural Resources
P.O. Box 30241
Lansing, MI 48909

PR 5103-1 Rev. 9/89

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES
WASTE MANAGEMENT DIVISION

POLLUTION LIABILITY INSURANCE

(Nonsudden Accidental)

HAZARDOUS WASTE MANAGEMENT LIABILITY AMENDATORY ENDORSEMENT (MICHIGAN)

This endorsement changes the policy effective on the inception date of the policy or as of the date indicated below. Attachment of this endorsement to the pollution liability policy will fulfill the insurance requirements of the State of Michigan Act 64, P.A. 1979, as amended (Hazardous Waste Management Act) and Administrative Rule R 299.9710 of the Michigan Administrative Code.

Insurer: National Union Fire Ins. Co.
Insurer's Address: 500 W. Madison St. Chicago, IL 60606

Date Effective: March 5, 1990

Policy Period From: 10/7/89 To: 10/7/90

Policy Number: PLL-7166356

Insured: Grede Foundries, Inc.
Insured's Address: P.O. Box 26499 Milwaukee, WI 53226

Name, Address, and EPA I.D. No. of Facility(ies) Covered:
Grede Foundries, Inc.
801 South Carpenter Ave.
Kingsford, MI 49801
MID006131890

The Insurer hereby certifies that it has issued the Insured the policy of insurance identified above to provide financial assurance and responsibility for bodily injury and property damage to third parties caused by nonsudden accidental occurrences arising from operation of the facility(ies) identified above.

The insurance afforded with respect to nonsudden accidental occurrences is subject to all of the terms and conditions of the policy provided however that any provision of the policy inconsistent with Sections A through E of this form are hereby amended to conform with Sections A through E.

A. Limits of liability as respects bodily injury and property damage are provided in the amount of:

$ 4,000,000 Per Occurrence $ 8,000,000 Annual Aggregate

The following deductible per occurrence applies (if none, so state) $ 250,000

B. Legal defense costs are covered **in addition** to the stated limit(s) of liability in this policy.

C. No exclusion of liability coverage relating to pollutants, contaminants, or irritants applies if an occurrence is a nonsudden accidental occurrence.

D. The Insurer will provide the Waste Management Division, Department of Natural Resources, P.O. Box 30241, Lansing, MI 48909 with at least thirty (30) days written notice of cancellation, termination, or material change to this policy which affects the coverages required by R 299.9710. Such notices shall be given no matter which party initiates the cancellation, termination, or material change and whether or not nonpayment of premium is involved.

E. The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the Insured for any such payment made by the Insurer.

I hereby certify that the wording of this endorsement is identical to the wording provided by the Director on the date above written, and that the Insurer is licensed to transact the business of insurance, or is eligible to provide insurance as an excess or surplus lines insurer, in the State of Michigan.

Filing of this endorsement is required by law (MAC R 299.9710)

Signature of Authorized Agent — Date: 6/8/90

Alexander & Alexander
Name of Agent or Broker

411 E. Wisconsin Ave., S#2050
Street and Number

Milwaukee, WI 53202
City, State, and Zip Code

MAIL TO:
Waste Management Division
Hazardous Waste Permits Section
Department of Natural Resources
P.O. Box 30241
Lansing, MI 48909

PR 5103-2
Rev. 11/89

GREDE FOUNDRIES, INC.

GENERAL OFFICES
P.O. BOX 26499
MILWAUKEE, WISCONSIN 53226-0499
TELEPHONE (414) 257-3600

May 31, 1990

Mr. Steve Sliver
Waste Management Division
Michigan Department of
Natural Resources
Post Office Box 30241
Lansing, MI 48909

Dear Steve:

Enclosed is a certificate of insurance evidencing the addition of coverage for our Kingsford, Michigan facility.

Should you have any questions, please feel free to call me.

Very truly yours,

GREDE FOUNDRIES, INC.

Gary A. Ertel
Assistant Treasurer

GAE:gz

Enclosure

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES WASTE MANAGEMENT DIVISION
POLLUTION LIABILITY INSURANCE (Sudden and Accidental)
HAZARDOUS WASTE MANAGEMENT FACILITY LIABILITY AMENDATORY ENDORSEMENT
(MICHIGAN)

This endorsement changes the policy effective on the inception date of the policy or as of the date indicated below. Attachment of this endorsement to the pollution liability policy will fulfill the insurance requirements of the State of Michigan Act 64, P.A. 1979, as amended (Hazardous Waste Management Act) and Administrative Rule R 299.9710 of the Michigan Administrative Code.

Insurer: National Union Fire Insurance Company of Pittsburgh, PA.

Insurer's Address: 500 West Madison Street, Suite 1000, Chicago, IL 60606

Policy Number: PLL-7166356

Insured: Grede Foundries, Inc.

Insured's Address: P.O. Box 26499
Milwaukee, WI 53216

Date Effective: March 5, 1990

Policy Period from: October 7, 1989 to October 7, 1990

Name, Address, and EPA I.D. No. of Facility(ies) Covered:

Grede Foundries, Inc.
801 South Carpenter Ave.
Kingsford, MI 49801
MID006131890

The Insurer hereby certifies that it has issued the Insured the policy of insurance identified above to provide financial assurance and responsibility for bodily injury and property damage to third parties caused by sudden and accidental occurrences arising from operation of the facility(ies) identified above.

The insurance afforded with respect to sudden and accidental occurrences is subject to all of the terms and conditions of the policy provided however that any provision of the policy inconsistent with Sections A through E of this form are hereby amended to conform with Sections A through E.

A. Limits of liability as respects bodily injury and property damage are provided in the amount of:

$ 4,000,000 Per Occurrence, $ 8,000,000 Annual Aggregate

The following deductible per occurrence applies: $ 250,000
(if none, so state)

B. Legal defense costs are covered in addition to the stated limits of liability of the policy subject to a cap of twenty five percent (25%) of the stated limits of liability.

C. No exclusion of liability coverage relating to pollutants, contaminants or irritants applies if an occurrence is sudden and accidental.

D. The Insurer will provide the Waste Management Division, Department of Natural Resources, P.O. Box 30241, Lansing, MI 48909 with at least thirty (30) days written notice of cancellation, termination, or material change to this policy which affects the coverages required by R 299.9710. Such notices shall be given no matter which party initiates the cancellation, termination, or material change and whether or not nonpayment of premium is involved.

E. The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the Insured for any such payment made by the Insurer.

I hereby certify that the wording of this endorsement is identical to the wording provided by the Director on the date above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines Insurer, in the State of Michigan.

Matthew M. Henry

Matthew N. Henry, Senior Underwriter Date 5-23-90

Authorized Representative of National Union Fire Insurance Company of Pittsburgh, PA

500 West Madison Street, Suite 1000, Chicago, IL 60606-2511

GREDE FOUNDRIES, INC.
GENERAL OFFICES
P.O. BOX 26499
MILWAUKEE, WISCONSIN 53226-0499
414-257-3600
(FAX) 414-257-3600 EXT. 286

IRON MOUNTAIN FOUNDRY
801 SOUTH CARPENTER AVENUE
KINGSFORD, MI 49801
TELEPHONE (906) 774-7250

May 29, 1990

Mr. Hank Switzer
MICHIGAN DEPT. OF NATURAL RESOURCES
Regional Headquarters
1990 US 41 South
Marquette, MI. 49855

Dear Mr. Switzer:

Please find attached copies of our:

1) Waste analysis plan as developed.

2) Our revised post closure to reflect changes due to our waste material being transported to Menominee, Michigan for disposal.

With these changes Grede Foundries, Iron Mountain Division, should be in complete compliance with subtitle C of the Resource Conservation and Recovery Act and the Hazardous Waste Management Act, 1979 P.A. 64.

If there are any questions feel free to contact me at our Iron Mountain Plant at (906) 774-7250.

Thank you,

GREDE FOUNDRIES, INC.
Iron Mountain Division

Ronald L Olson
Mgr. Maint & Eng.

enc.
cc: D. Bergeron
file

CHEM-BIO CORPORATION
ENVIRONMENTAL SERVICES
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

COPY

05/12/90 LABORATORY REPORT

G031 8449791 W61
CA/* / / /

GREDE FOUNDRIES, INC.
9898 W BLUEMOUND RD
MILWAUKEE ,WI 53226
ATTN: RON OLSON

SAMPLE 90127-G01733 WASTE IRON/LOAD #1/BRIAN CARLSON/MATERIAL FROM SAME LOAD MIXED/5-1-90/9:30AM
DATE COLLECTED 05/01/90 DATE RECEIVED 05/07/90

TEST NAME	RESULT	UNITS	EP TOXICITY		EP LIMIT
CADMIUM - EP			0.34	MG/L	1.0
CHROMIUM - EP			<0.02	MG/L	5.0
LEAD - EP			<0.2	MG/L	5.0

METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, 1979, EPA-600/4-79-020.
TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL/CHEMICAL METHODS, 1982, EPA SW846.
ASE CONTACT OUR CLIENT SERVICE DEPARTMENT WITH QUESTIONS. REMAINING WASTE SAMPLES WILL BE RETURNED 6 WEEKS FROM THE RECEIVING DATE OF SAMPLE. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT. WI DNR LAB CERTIFICATION #241283020/A.I.H.A. ACCREDITED.
N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL KM

May 25, 1990

WASTE ANALYSIS PLAN

Grede, Iron Mountain, cupola baghouse dust.

Samples of cupola baghouse dust will be taken on a once per month basis in a 100 gram plastic container:

A: One from the discharge auger prior to the mixing vessel.

B: One after the dust has been treated to a 6 to 1 ratio.

Required on the sample will be the:

1: Load number.

2: Operator taking sample.

3: Date and time.

These samples will be sent to Chem Bio Corporation, 140 East Ryan Road, Oak Creek, Wisconsin, 53154.

The required test to be performed will be E.P. toxicity for:

	E.P. Limits	
Cadmium	MG/L	1.0
Chromium	MG/L	5.0
Lead	MG/L	5.0

A labratory report will be returned to the plant and filed for audit with a copy being sent to the Michigan Department of Natural Resources.

CLOSURE

The closure of the cupola emission control dust treatment operation could take place when any of the following events occured:

1. The melting scrap or process was changed so that the control dust was non-hazardous.

2. The cupola was replaced with another type melting operation.

3. The plant shut down.

The closure of the facility would have as its principle objective the removal of any and all cupola emission control dust from the Harsell collector, its hoppers, and the mixing area. Once removed, there would be no need for further maintenance, controls, reports, inspections, or actions on the part of present or future owners of the property.

The closure steps and estimated costs would be as follows:

1.	Shut down melting operation and drop cupola "bottom".	$ 0.00
2.	Shakedown and shutdown Harsell baghouse. (2 hrs X $12.00/hr)	24.00
3.	Enter baghouse and brush down any remaining dust into collector hoppers. (24 hrs X $12.00/hr)	288.00
4.	Empty and brush down baghouse hoppers. (4 hrs X 12.00/hr)	48.00
5.	Treat final baghouse dust and transport to landfill. (7 hrs X 30.00/hr)	210.00
6.	Deliver treated waste to landfill (Menominee). ($200.00 Tipping Fee) ($275.00 Trucking)	475.00
	TOTAL ESTIMATED CLOSURE COSTS	$1045.00

At this point, closure of the hazardous waste treatment area would be complete, and future use for other types of manufacturing or storage would not be precluded.

GREDE FOUNDRIES, INC.

GENERAL OFFICES

P.O. BOX 26499
MILWAUKEE, WISCONSIN 53226-0499
414-257-3600
(FAX) 414-257-3600 EXT. 286

IRON MOUNTAIN FOUNDRY
801 SOUTH CARPENTER AVENUE
KINGSFORD, MI 49801
TELEPHONE (906) 774-7250

May 23, 1990

Mr. Hank Switzer
Michigan Department of Natural Resources
Regional Headquarters
1990 US 41 South
Marquette, Michigan 49855

Dear Hank:

Per our meeting and discussion on May 21, 1990 at our Iron Mountain facility, the following items are being addressed as follows:

1. Waste Analysis Plan is being finalized and will be completed by June 6, 1990. It will be in our plant files, and ready for your review at that time.

2. A question was raised as to why Grede Foundries, Inc., had purchased a $15,000 letter of credit for proof of financial responsibility for closure and post closure. This was due to the fact that we could not purchase one for the lesser amount required for closure and post closure.

3. Post Closure Plan was revised on October of 1989. This is being looked into further to comply with, all Post Closure requirements. This will be completed and made available to your office by June 6, 1990.

4. Pollution Legal Liability Insurance has been applied for and sent to your Lansing office. We are waiting your review on this.

If I can be of further assistance, feel free to contact me at our Iron Mountain plant. (906) 774-7250.

Thank You,

Ronald L. Olson
Manager-Maintenance and Engineering
Grede-Iron Mountain Division

STATE OF MICHIGAN
DEPARTMENT OF ATTORNEY GENERAL

STANLEY D. STEINBORN
Chief Assistant Attorney General

FRANK J. KELLEY
ATTORNEY GENERAL

LANSING
48909

May 18, 1990

Russell Hall
120 N. Sixth Street
Escanaba, MI 49829

RE: Grede Foundries, Inc. v Michigan DNR, et al;
Dickinson County CC No. D89-6514-AA

Dear Mr. Hall:

On May 14, 1990, Ronald Olson of Grede Foundries, Inc., sent Robert Schmeling of the DNR a letter requesting a meeting to discuss licensing Grede's Type III landfill.

I have asked the DNR to schedule a meeting sometime during the week of June 4, 1990 here in Lansing to discuss possible settlement of this litigation and hope that you will be able to attend the meeting.

Please contact me if you have any questions.

Very truly yours,

FRANK J. KELLEY
Attorney General

Gary L. Hicks
Assistant Attorney General
Department of Attorney General
Natural Resources Division
P.O. Box 30028
Lansing, Michigan 48909
Telephone (517) 373-7540

GLH:rsc
7/grede-l

cc: Phil Schrantz
Robert Schmeling
Jim Roberts

cc: Hank Switzer, MRQ

GREDE FOUNDRIES, INC.

GENERAL OFFICES
P.O. BOX 26499
MILWAUKEE, WISCONSIN 53226-0499
TELEPHONE (414) 257-3600

May 17, 1990

Mr. Steve Sliver
Waste Management Division
Michigan Dept. of Natural Resources
P.O. Box 30241
Lansing, Michigan 48909

Dear Steve:

Enclosed are the necessary forms for Grede Foundries, Inc., to self-insure $2,000,000 of the hazardous waste insurance requirement. Upon the next renewal of our EIL policy with National Union we will be reducing the amount of insurance we purchase.

Should you have a problem with the preparation of these forms or want additional information please call.

Very truly yours,

GREDE FOUNDRIES, INC.

Gary A. Ertel
Assistant Treasurer

GAE:mdk:1

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

MID006131890

April 23, 1990

TO: Robert Schmeling, Marquette District Supervisor
Waste Management Division

FROM: Dennis Drake, Chief, Compliance and Enforcement Section
Waste Management Division

SUBJECT: Grede Foundries

The above company/facility has been referred to the Compliance and Enforcement Section for violation(s) of Act 64 and RCRA. These violations include, but are not limited to, failure to obtain financial assurance; failure to provide an acceptable closure plan; and failure to provide an acceptable waste analyses plan.

Because of these identified violation(s), the facility has been determined to be a High Priority Violator (HPV). Pursuant to our commitments to the U.S. EPA, please report this facility to Region V as an HPV by sending them a properly completed CMEL with your next monthly report. Specifically, an "H" should be reported in the appropriate "class one" box(es) in the "Class and Violations" section of the CMEL.

cc: Mr. Phil Schrantz, DNR

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

January 8, 1990

To: Phil Schrantz, Compliance & Enforcement, WMD

From: Liz Browne, Env. Monitoring Coordinator, WMD

Subject: Grede Foundries, Inc., Kingsford, MI
MID 006 131 890

The draft Consent Judgement for Grede Foundries that accompanied your December 26 1990 memo to Mr. Gary Hicks has been reviewed. The emphasis of this review was on Section VI, item 18, parts A-D. There were a few concerns noted, and are as discussed below:

1. VI.18.B.4. The time frame for sampling, analytical work, and data analysis for the soil sampling appears fairly short. It would not be unreasonable to extend it another 1-2 weeks due to the length of time most laboratories are requiring for TCLP and EP Toxicity analysis. This would allow the facility and there consultants time to adequately analyze the data, and to generate a report of good quality. If the facility does not find the time frames restrictive, there is no need to change them.

2. VI.18.B.5. This paragraph is confusing. There is no indication in the earlier items that some method of screening would be used to limit the number of samples analyzed from the total taken. It may be clearer to indicate that, based on the results of this initial run of samples, more analyses may be necessary. Alternatively, if this phased sampling is described in the approved study, it may be helpful to identify the appropriate section within the study plan.

3. VI.18.D.4.c. The need to supply the detection limits associated with each sampling parameter should either be included in item c, or added as a separate item in this grouping.

This concludes the review of the draft. The items outlined under the Compliance Program should aid in obtaining the needed workplans and proposals.

Please let me know if you have questions concerning this memo.

cc: EPA Reporting
HWP/C & E

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

DAVID F. HALES, Director

MID 006131 890

Regional Office
1990 U.S. 41 South
Marquette, Michigan 49855

August 26, 1988

Mr. Dave Van Dyke
Grede Foundries, Inc.
P. O. Box 26499
Milwaukee, Wisconsin 53226

Dear Mr. Van Dyke:

SUBJECT: TSD Inspection
Kingsford Plant
Dickinson County

On August 17, 1988, staff made an inspection of your facility. The purpose of this inspection was to determine compliance with the Hazardous Waste Regulations of Subtitle C of the Federal Resource Conservation and Recovery Act (RCRA) of 1976.

As a result of the inspection, deficiencies were found in the following regulations:

1. Per 40 CFR 265.51-265.56, a generator of hazardous waste must have written contingency plan, including: 1) the actions personnel must take to respond to releases of hazardous waste; 2) arrangements agreed to with local emergency organizations; 3) names, addresses and phone numbers of all persons qualified to act as emergency coordinator; 4) a list of all emergency equipment, including location and description; 5) an evacuation plan if necessary.

2. Per 40 CFR 265.112, by May 19, 1981, the owner or operator must have a written closure plan. He must keep a copy of the closure plan and all revisions to the plan at the facility until closure is completed and certified in accordance with 265.115.

3. Per 40 CFR 265.13(4b), the owner or operator must develop and follow a written waste analysis plan which describes the procedures which he will carry out to comply with paragraph (a) of this section. He must keep time plan at the facility.

Please respond by September 28, 1988, in writing to this office indicating actions taken to correct the violations explained above.

If you have questions regarding this matter, please contact me at the number below.

Sincerely,

Robert Schmeling II

Robert Schmeling II
Regional Supervisor
Waste Management Division
Region I
906-228-6561

ka

cc: U.S. EPA
Mr. John Bohunsky, DNR

JUN 2 9 1988

JUN 2 9 1988

5HS-13

Mr. Jim Roberts
Environmental Engineer
Waste Management Division
Michigan Department of Natural Resources
P.O. Box 30028
Lansing, Michigan 48909

Re: Grede, Inc., Iron Mountain Foundry
MID 006 131 890

Dear Mr. Roberts:

The purpose of this letter is to place in writing specific recommendations your office should follow in order to obtain a totally enclosed treatment (TET) determination for Grede, Inc., Iron Mountain Foundry (Grede).

As indicated to you in a phone conversation on June 2, 1988, with Claude Brogunier of my staff, the latest Grede design is similar to the Region VII, TDJ Inc., design (being handled by Harriet Jones), for which the United States Environmental Protection Agency (U.S. EPA) Headquarters is likely to issue a similarly positive determination. The Agency will probably act in this manner in order to uphold consistent TET policy for both applicant foundries.

Please find enclosed two items which should help facilitate a TET determination. The first enclosure is the Determination Request from David Wagoner, Director, Waste Management Division, Region VII, to Marcia Williams (former), Director, Office of Solid Waste. The second is the TET determination itself from Joseph Carra, Director, Waste Management Division, Washington, D.C. to David Wagoner.

We suggest that you draft a letter similar to the Determination Request and send it to:

Ms. Sylvia Lowrance
Director
Office of Solid Waste WH-562
U.S. Environmental Protection Agency
401 M Street SW
Washington, D.C. 20460

Sending the request to Ms. Lowrance should ensure a prompt reply.

According to conversations with Monica Chapman (U.S. EPA), the Determination for Grede, Inc., should resemble the enclosed TET Determination for Region VII.

Should you have any questions, please call Mr. Claude Brogunier of my staff, at (312) 353-8234.

Sincerely,

Richard T. Traub, Chief
Michigan Section
RCRA Permitting Branch
Waste Management Division

Enclosures

bcc: C. Brogunier
R. Traub
File

5HS-13:BROGUNIER:js:6/17/88:6-6161:Disk #1

RCRA PERMITS	TYP.	AUTH.	IL. CHIEF	IN. CHIEF	MI. CHIEF	MN/WI CHIEF	OH. CHIEF	RPB CHIEF	O. R. A.D.D.	WMD DIR
INIT. DATE	6/22/88				6/23/88					

CONVERSATION RECORD

TIME: 2:40 PM | DATE: 6-2-88

TYPE: ☐ VISIT ☐ CONFERENCE ☒ TELEPHONE ☒ INCOMING ☐ OUTGOING

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU	ORGANIZATION (Office, dept., bureau, etc.)	TELEPHONE NO.
JIM ROBERTS - MDNR	WASTE MANAGMT. DIVISION	(517)-373-2730

ROUTING

NAME/SYMBOL	INT

SUBJECT: TOTALLY ENCLOSED TREATMENT (TET) DETERMINATION OF GREDE FOUNDRIES

SUMMARY

Jim verified for me that the emission dust from the cupola is indeed, hazardous waste, even when traversing between the cupola and baghouse entrance. (This was very unclear in an earlier Marcia Williams memo stating that, 'the dust became hazardous waste only at, and not before, the bottom of the baghouse hopper' - memo dated Dec. 22, 1986). The dust is EP toxic for lead and cadmium by both EPA and MDNR toxicity procedures. I indicated to Jim that TET determinations were made by Jim Berlow's group in Washington, DC. (Waste Management Branch). I also recommended that we follow Harriet Jones' procedure (Region VII) for dealing with their cupola facility. By precedent, Jim Berlow said that he must also issue a positive TET determination to Grede Foundries, since their proposal was identical to the TDI group's proposal for the Region VII cupola facility (Please note that all supporting documents are included in this Part A file. The key memos are found

(continued)

ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION	SIGNATURE	DATE

ACTION TAKEN

SIGNATURE	TITLE	DATE

CONVERSATION RECORD

TIME: 2:40 PM | DATE: 6-2-88

TYPE: ☐ VISIT ☐ CONFERENCE ☒ TELEPHONE ☒ INCOMING ☐ OUTGOING

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU	ORGANIZATION (Office, dept., bureau, etc.)	TELEPHONE NO:
ROBERTS (continued)	—	—

ROUTING

NAME/SYMBOL	INT

SUBJECT: TET DETERMINATION FOR GREDE FOUNDRIES (continued)

SUMMARY

between the blue spacer papers, in Section 3). Jim Roberts agreed to a conditionally positive (approval) TET determination for Grede Foundries - the condition being that Grede must install their TET treatment system and demonstrate no releases of hazardous constituents. Jim said he'll have Air Quality Program people (in MDNR) assist in Sampling and analysis. Harriet Jonas stressed that the TET included the cupola - and this part of the process must be non-leaking.

I told Jim Roberts that I'd contact Jim Berlow's office in Washington to find out what information is needed to file for a TET determination.

ACTION REQUIRED

Call Jim Berlow to find out info. needed. Then file TET application.

NAME OF PERSON DOCUMENTING CONVERSATION	SIGNATURE	DATE
Claude R. Brogunier	Claude R. Brogunier	6-2-88

ACTION TAKEN

SIGNATURE	TITLE	DATE

CONVERSATION RECORD

TIME 4:40 | DATE 6-2-88

TYPE: ☐ VISIT ☐ CONFERENCE ☐ TELEPHONE ☒ INCOMING ☐ OUTGOING

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU	ORGANIZATION (Office, dept., bureau, etc.)	TELEPHONE NO.
MONICA CHAPMAN	Jim Berlow's Group Waste Mgmt. Div.-Washington	FTS 382-7917

ROUTING	
NAME/SYMBOL	INT

SUBJECT: TET DETERMINATION FOR GREDE FOUNDRIES

SUMMARY: Ms. Chapman called to relay the viewpoint of her office (Jim Berlow) on the character of the flue dust. She indicated that if it shows EP toxicity, then it IS EP-Toxic and IS a characteristic hazardous waste. Since the lab reports show that the dust is EP toxic for Pb and Cd, then it is dust throughout the travel path of the particles (i.e. from cupola to baghouse). Therefore, it is proper to be evaluating the proposed treatment unit AS TET.

ACTION REQUIRED

NONE

NAME OF PERSON DOCUMENTING CONVERSATION	SIGNATURE	DATE
CLAUDE R. BROUWER	Claude R. Brouwer	6-2-88

ACTION TAKEN

SIGNATURE	TITLE	DATE

CONVERSATION RECORD

TIME: 3:10 PM

DATE: 6-2-88

TYPE: ☐ VISIT ☐ CONFERENCE ☒ TELEPHONE ☐ INCOMING ☒ OUTGOING

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU	ORGANIZATION (Office, dept., bureau, etc.)	TELEPHONE NO:
JIM WILLIAMS	GREDE FOUNDRIES	(414) 257-3600

SUBJECT: TET Determination of Grede Foundries.

ROUTING	
NAME/SYMBOL	INT

SUMMARY: I called Mr. Williams to communicate the results of my investigation on the TET (potential for gaining TET status) application Grede Foundries had submitted to Jim Barlow's group. I told him that Jim Barlow, Jim Roberts, and myself had agreed that Grede should be granted TET status - on the condition that they can demonstrate no release of hazardous constituents to the environment from the units defined in the TET train.

I told him that our office would request a TET determination from Washington, DC right away.

ACTION REQUIRED

FILE TET DETERMINATION REQUEST WITH SYLVIA LOWRANCE.

NAME OF PERSON DOCUMENTING CONVERSATION	SIGNATURE	DATE
CLAUDE R. BROGUNIER	Claude R Brogunier	6-2-88

ACTION TAKEN

SIGNATURE	TITLE	DATE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

5/24/88

Registered Mail

MEMORANDUM

SUBJECT: Totally Enclosed Treatment System Proposal

FROM: David A. Wagoner, Director
Waste Management Division
EPA Region VII

TO: Marcia E. Williams, Director
Office of Solid Waste (WH-563)

The purpose of this memo is to request a determination on the application of the totally enclosed treatment (TET) system definition as it applies to a process proposed for generic marketing by an Iowa firm, TDJ Group, Inc. The process is similar to a proposal received by Region V for the Grede Foundry which was determined by EPA not to qualify as a TET system. Enclosed is a copy of information pertaining to the Grede Foundry proposal. The major difference in the system being proposed by TDJ is the location at which treatment occurs. Instead of treatment occurring after the baghouse, as in the Grede Foundry proposal, TDJ proposes to locate the treatment equipment between the cupola and the baghouse.

Region VII has been asked by TDJ to determine whether or not such a system would qualify for exemption from regulation under RCRA as a TET system. As discussed in a September 29, 1987 conversation between Monica Chapman of your staff and Harriett Jones and Jim Callier of Region VII, we are enclosing copies of the proposal details submitted by TDJ. Please note that the information submitted by TDJ has been claimed as confidential.

If a determination is made that the proposed system does qualify for exclusion as TET, specific issues will require resolution (such as whether or not the baghouse constitutes part of the TET equipment train and the location at which samples must be taken to demonstrate the success of the treatment system).

We would appreciate being informed of your determination in this matter at your earliest opportunity. TDJ is extremely anxious to proceed. Please also inform us if any other similar requests have been received by Headquarters or any of the Regions.

If you have any questions concerning the above, the Region VII contacts are Harriett Jones and Jim Callier, either of whom may be reached at FTS 757-2887.

Attachments

cc: Waste Management Division Directors, Regions I - X (w/o encl)

CONVERSATION RECORD

TIME: 8:30 AM | DATE: 5-24-88

TYPE: ☐ VISIT ☐ CONFERENCE ☑ TELEPHONE ☐ INCOMING ☑ OUTGOING

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU	ORGANIZATION (Office, dept., bureau, etc.)	TELEPHONE NO:
HARRIET JONES	Region III EPA	8-757-2887

ROUTING

NAME/SYMBOL	INT

SUBJECT: TET Determinations of Cupola Furnaces - TDJ Group.

SUMMARY:

Mrs. Jones works on a TET application made by a cupola facility employing the Furness System (same as proposed Grede design) in Colorado. The people responsible for installation are the TDJ group.

Mrs. Jones said:

(1.) Washington issued a positive TET on the DESIGN but the foundry must demonstrate NO leakage of toxic constituents at its facility in order to be granted a ⊕TET status on the operation, also.

(2.) Suggests that we do some. She was of opinion that her facility would fail the no-release requirement due to cupola emissions. In this way, the Company would be forced to eventually file a Part B permit application for treatment (since leakage will ≠ failure of TET criteria) anyway.

ACTION REQUIRED (Cause):

NONE

NAME OF PERSON DOCUMENTING CONVERSATION	SIGNATURE	DATE
CLAUDE R. BROGUNIER	Claude R. Brogunier	6-3-88

ACTION TAKEN

NONE

SIGNATURE	TITLE	DATE
—	—	—

Traub

23 MAY 1988

5HS-13

Mr. Rudy Trinks
BASF
1255 Broad Street
Clifton, NJ 07015

Dear Mr. Trinks:

Here is the information you requested regarding notification of your facility's intent to burn hazardous waste in boilers. Information regarding recycling regulations pertinent to your organic solvent waste is also included.

Please find enclosed the necessary notification form (Form 8700-12). You need to file this form stating your intention to burn hazardous waste in boilers in accordance with CFR 266.35. You should submit this form to the address on the back cover.

Secondly, you are correct in believing that distillation of your solvents on site is a non-regulated activity. I've enclosed a decision diagram for your elucidation of the rationale the EPA uses to make this determination.

Since the distillation still bottom you will be generating is listed as F005 (40 CFR 261.31), that residue will have to be treated in accordance with the standards detailed in Appendix II to 40 CFR 268.

If you have any question on this matter, please contact Claude Brogunier at (312) 353-8234.

Sincerely yours,

George Hamper, Chief
Ohio Section, RPB

Enclosures

cc: Richard Traub
George Hamper

MAY 20 1988

5HS-13

Mr. Rudy Trinks
BASF
1255 Broad Street
Clifton, NJ 07015

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If you have any question on this matter, please contact Claude Brogunier at (312) 353-8234.

Sincerely yours,

ORIGINAL SIGNED BY/
GEORGE J. HAMPER
George Hamper, Chief
Ohio Section, RPB

Enclosures

cc: Richard Traub
George Hamper

5HS:C.BROGUNIER:fm:5/20/88

Disc #1

RCRA PERMITS	TYP.	AUTH.	IL CHIEF	IN. CHIEF	MI. CHIEF	MN/WI CHIEF	OH. CHIEF	RPB CHIEF	O.R. A.D.D.	WMD DIR
INIT. DATE	JH 5/20/88						5/20/88	•	•	

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING
BOX 30028
LANSING, MI 48909

GORDON E. GUYER, Director

May 4, 1988

Mr. Richard Traub, Chief
Michigan Section, RCRA Permitting Branch
U.S. EPA - Region V
230 South Dearborn Street, 5HS-13
Chicago, Illinois 60604

Dear Mr. Traub:

Please find attached an information package submitted by Grede Foundries for a treatment process which they state meets the definition of a totally enclosed treatment process. The company met with Ms. Marcia Williams and other U.S. EPA headquarters personnel on March 9, 1987, to discuss this process. The company states that Ms. Williams concluded that the treatment process qualifies for the totally enclosed treatment exemption.

The company is utilizing a process used in California, called the "Furness Process", which treats the waste between the cupola stack and the baghouse. The treatment process is a chemical reaction of excess calcium in the waste stream with sodium silicate and metallics. According to the documentation submitted, the final baghouse dust is an insoluble metallic silicate.

Since the U.S. EPA has already reviewed this process, I would like a written verification that the process meets the definition of a totally enclosed treatment process. If the process does not meet the definition, what can the company do to modify the process to meet it?

The company has had their Michigan Act 64 operating license application called in. To meet the Hazardous and Solid Waste Amendment permit application submittal deadline of November 8, 1988, an expedited review of this proposal is needed. If the process does not meet the exemption definition the company must prepare a permit application.

If you have any questions concerning this matter, please contact me.

Sincerely,

James D. Roberts

James D. Roberts
Environmental Engineer
Waste Management Division
517-373-2730

cc: Mr. David Van Dyke
Mr. Ken Burda
Mr. Rob Schmeling

CONVERSATION RECORD

TIME: 3:00 | DATE: 5-18-88

TYPE: ☐ VISIT ☐ CONFERENCE ☑ TELEPHONE ☐ INCOMING ☑ OUTGOING

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU	ORGANIZATION (Office, dept., bureau, etc.)	TELEPHONE NO:
MONICA CHAPMAN	WASHINGTON, DC WASTE MANAGMT. DIVISION	FTS-475-7236

ROUTING

NAME/SYMBOL	INT

SUBJECT: TET EXEMPTION FOR GREDE FOUNDRIES

SUMMARY: First conversation I had with her regarding this issue. She referenced me to a Region VII cupola plant that was granted TET status. She mentioned that Harriet Jones was in charge of that (FTS-757-2887) facility.

Other referrals by Ms. Chapman:

Jim Conklin: Accelerated Rule (for 3004(n)) coming out of OAQPS for fugitive emissions

Casey Hutvedt: Comprehensive Rule (3004(n)) for TSDF's

Irene Horner: Did control on Grede Foundries; Waste Trtmt Branch 382-7368

Ron Meyers: Air Pollution Control reg's 629-5601

Jim Benlow: Head of TET group in WMD (supervises Chapman): 382-7917

ACTION REQUIRED: None, except contact Harriet Jones.

NAME OF PERSON DOCUMENTING CONVERSATION	SIGNATURE	DATE
CLAUDE R. BROUNIER	Claude R. Brounier	6-3-88

ACTION TAKEN: Contacted Harriet Jones by phone on 5-24-88.

SIGNATURE	TITLE	DATE
Claude R. Brounier	ENVIRONMENTAL ENGINEER	6-3-88

RCRA Inspection Report

Identification Number: MID 006131890

Installation Name: Grede Foundries Inc.

Location Address: South Carpenter Rd.

City: Kingsford State: MI

Date of inspection: July 15 19 86 Time of inspection (from) 9:30 (to) 12:30

Person(s) Interviewed	Title	Telephone
Dave Van Dyke	Director of Safety and Environmental Protection	414-257-3600
Ron Olsen	Maintenance Supt.	

Inspector(s)	Agency/Title	Telephone
Tom Richard	MDNR	517-373-2730
Tom Velker	MDNR	517-275-5151

Installation Activity (mark only one box) Inspection Form #

Treatment, Storage/Disposal per 40 CFR 265.1 and/or Generation and/or Transportation	A
Treatment/Storage/Disposal (no generation or Transportation)	A
Generation and Transportation	B, C
Generation only	B
Transportation only	C

INSPECTION FORM B

Section A: Scope of inspection

Standards for generators of HAZARDOUS WASTE subject to 40 CFR 262.10

Section B: MANIFEST REQUIREMENTS (Part 262, Subpart B)

	Yes	No	NI*	Remarks
(1) Does the generator have copies of the manifest available for review? 262.40	___	___	NA	Company indicat. that the waste is not hazardous when it leaves the site.
(2) Examine manifests for shipments in past 6 months. Indicate approximate number of manifested shipments during that period. _____				
(3) Do the manifest forms examined contain the following information? (If possible, make copies of, or record information from, manifests that do not contain the critical elements) 262.21	___	___	___	_____
a. Manifest document number?	___	___	___	_____
b. Name, mailing address, telephone number, and EPA ID number of generator?	___	___	___	_____
c. Name and EPA ID number of transporter(s)?	___	___	___	_____
d. Name, Address, and EPA ID Number of designated permitted facility and alternate facility?	___	___	___	_____
e. The description of the waste(s) (DOT shipping name, DOT hazard class, DOT identification number)?	___	___	___	_____
f. The total quantity of waste(s) and the type and number of containers loaded?	___	___	___	_____
g. Required certification?	___	___	___	_____
h. Required signatures?	___	___	___	_____

(4) Reportable exceptions 262.42

a. For manifests examined in (2) (except for shipments within the last 35 days), enter the number of manifests for which the generator has NOT received a signed copy from the designated facility within 35 days of the date of shipment. _____

b. For manifests indicated in (4a), enter the number for which the generator has submitted exception reports (40 CFR 262.42) to the Regional Administrator. _____

Section C - PRE-TRANSPORT REQUIREMENTS
(40 CFR Part 262 Subpart C)

		Yes	No	NI	Remarks
(1)	Is waste packaged in accordance with DOT regulations? (Required prior to movement of hazardous waste off-site) 262.30				
(2)	Are waste packages marked and labeled in accordance with DOT regulations concerning hazardous waste materials? (Required prior to movement of hazardous waste off-site)	262.31 and 262.32			
(3)	If required, are placards available to transporter? 262.33				
** (4)	Pre-shipment Accumulation:				
a.	Is hazardous waste accumulated in containers? If no, skip to b. 262.34	✓			
i.	Is each container clearly marked with the date on which the period of accumulation began?		✓		Cement truck is filled and emptied 5 times daily.
ii.	Have more than 90 days elapsed since the dates marked?		✓		
iii.	Is each container labeled or marked clearly with the words "Hazardous Wastes?"	✓			Per July 17 1986 letter from Company
iv.	Are containers in good condition?	✓			
v.	Are containers compatible with waste in them?	✓			
vi.	Are containers managed to prevent leaks?	✓			
vii.	Are containers stored closed?		✓		Cement truck is stored empty when not in use
viii.	Are containers inspected weekly for leaks and defects?	✓			
ix.	Are ignitable and reactive wastes stored at least 15 meters (50 feet) from the facility property line? (Indicate if waste is ignitable or reactive).			NA	

** applies only to GENERATORS that store hazardous waste on-site for 90 days or less without a permit. These items do not apply to generators whose waste is immediately transported off-site.

	Yes	No	NI	Remarks
x. Are incompatible wastes stored in separate containers? (If not, the provisions of 40 CFR 265.17(b) apply.)			NA	
xi. Are containers of incompatible waste separated or protected from each other by physical barriers or sufficient distance?			NA	
b. Is hazardous waste accumulated in tanks? If no, skip to c. 262.34 (January 11, 1982 revision)		✓		Waste is collected in a bag 40 yd
i. Is each tank labeled or marked clearly with the words "Hazardous Wastes"? 262.34 (January 1982 revision)				
ii. Are tanks used to store only those wastes which will not cause corrosion, leakage or premature failure of the tank? 265.192				
iii. Do uncovered tanks have at least 60 cm (2 feet) of freeboard, or dikes or other containment structures?				
iv. Do continuous feed systems have a waste-feed cutoff?				
v. Are waste analyses done before the tanks are used to store a substantially different waste than before? 265.193				
vi. Are required daily and weekly inspections done? 265.194				
vii. Are reactive and ignitable wastes in tanks protected or rendered non-reactive or nonignitable? Indicate if waste is ignitable or reactive. (If waste is rendered non-reactive or nonignitable, see treatment requirements.) 265.198				
viii. Are incompatible wastes stored in separate tanks? (If not, the provisions of 40 CFR §265.17(b) apply.) 265.199				

	Yes	No	NI	Remarks

ix. Has the owner or operator observed the National Fire Protection Association's buffer zone requirements for tanks containing ignitable or reactive wastes?

Tank capacity: _____ gallons

Tank diameter: _____ feet

Distance of tank from property line _____ feet

(see tables 2-1 through 2-6 of NFPA's "Flammable and Combustible Liquids Code - 1977" to determine compliance.)

c. Is hazardous waste accumulated in other than tanks or containers? ___ ___ ___ _____

d. Personnel training. 262.34 (a) 5

Do personnel training records include: 265.16

i. Job Titles?	✓			Per company letter dated 8/17/86.
ii. Job Descriptions?	✓			Training records attached to letter.
iii. Description of training?	✓			
iv. Records of training?	✓			
v. Did personnel receive the required training by 5-19-81?	✓			
vi. Do new personnel receive required training within six months?	✓			
vii. Do personnel training records indicate that personnel have taken part in an annual review of initial training?	✓			

e. Preparedness and Prevention 265. Subpart C

i. Maintenance and Operation of Facility:

Is there any evidence of fire, explosion, or release of hazardous waste or hazardous waste constituent? 265.31 ___ ✓ ___ _____

	Yes	No	NI	Remarks
ii. If required, does this facility have the following equipment: 265.32				
Internal communications or alarm systems?			NA	
Telephone or 2-way Radios at the scene of operations?			NA	
Portable fire extinguishers, fire control, spill control equipment and decontamination equipment?	✓			

Indicate the volume of water and/or foam available for fire control:

Cnty

	Yes	No	NI	Remarks
iii. Testing and Maintenance of Emergency Equipment: 265.33				
Has the owner or operator established testing and maintenance procedures for emergency equipment?			NA	
Is emergency equipment maintained in operable condition?			NA	
iv. Has owner/operator provided immediate access to internal alarms (if needed)?			NA	
v. Is there adequate aisle space for unobstructed movement?	✓			
vi. Has the owner or operator attempted to make arrangements with local authorities in case of an emergency at the facility?				

f. Contingency Plan and Emergency Procedures 265 Subpart D

Does the contingency plan contain the following information:

	Yes	No	NI	Remarks
i. The actions facility personnel must take to comply with §265.51 and 265.56 in response to fires, explosions, or any unplanned release of hazardous waste? (If the owner has a Spill Prevention, Control and Countermeasures (SPCC) Plan, he needs only to amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part (as applicable.) 265.52	✓			

		Yes	No	NI	Remarks
ii.	Arrangements agreed to by local police departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, pursuant to §265.37?			NA	
iii.	Names, addresses, and phone numbers (Office and Home) of all persons qualified to act as emergency coordinator.	✓			not home number
iv.	A list of all emergency equipment at the facility which includes the location and physical description of each item on the list, and a brief outline of its capabilities?			NA	waste does not present a hazard
v.	An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary? (This plan must describe signal(s) to be used to begin evacuation, evacuation routes and alternate evacuation routes?)			NA	waste is outside
vi.	Are copies of the Contingency Plan available at site and local emergency organizations?	✓			at the site
vii.	Is the facility emergency coordinator identified?	✓			
viii.	Is coordinator familiar with all aspects of site operation and emergency procedures?	✓			
ix.	Does the Emergency Coordinator have the authority to carry out the Contingency Plan?	✓			
x.	If an emergency situation has occured at this facility, has the emergency coordinator followed the emergency procedures listed in 265.56?	✓			

Section D: RECORDKEEPING AND REPORTING (Part 262, Subpart D)

	Yes	No	NI	Remarks
(1) Are all test results and analyses needed for hazardous waste determinations retained for at least three years? 262.40	✓			

Section E: INTERNATIONAL SHIPMENTS (Part 262 Subpart E)
262.50

	Yes	No	NI	Remarks
(1) Has the installation imported or exported hazardous waste? If "no", skip a and b.			N/A	
a. Exporting Hazardous Waste, has a generator:				
i. Notified the Administrator in writing?				
ii. Obtained the signature of the foreign consignee confirming delivery of the waste(s) in the foreign country?				
iii. Met the Manifest requirements?				
b. Importing Hazardous Waste, has the generator met the manifest requirements?				

Jim

GREDE FOUNDRIES, INC.

GENERAL OFFICES
P.O. BOX 26499
MILWAUKEE, WISCONSIN 53226-0499
TELEPHONE (414) 257-3600

GRAY IRON
IRON MOUNTAIN FOUNDRY-KINGSFORD, MICHIGAN
ROBERTS FOUNDRY CO., INC.-GREENWOOD, SOUTH CAROLINA
GREDE PERM CAST, INC.-CYNTHIANA, KENTUCKY
GREDE-VASSAR, INC.-VASSAR, MICHIGAN
DUCTILE IRON
LIBERTY FOUNDRY-WAUWATOSA, WISCONSIN
REEDSBURG FOUNDRY-REEDSBURG, WISCONSIN
WICHITA FOUNDRY-WICHITA, KANSAS
STEEL
MILWAUKEE STEEL FOUNDRY-MILWAUKEE, WISCONSIN
SPECIAL SERVICES
SHORT RUN SPECIALTY FOUNDRY-MILWAUKEE, WISCONSIN

March 16, 1988

Mr. Al Howard
Michigan DNR
Hazardous Waste Division
Ottawa Street Building
608 West Allegan Street
P. O. Box 30028
Lansing, MI 48909

Dear Mr. Howard:

Re: Grede Foundries-Iron Mountain Act 64 Operating License Application
MID 006 131 890

382-7917

By this letter, Grede Foundries acknowledges receipt of your February 26, 1988, "call in" notification. It is the intention of Grede Foundries-Iron Mountain to pursue the exemption of a totally enclosed treatment system in lieu of submission of an application.

Grede Foundries has completely scrubbed the plan for totally enclosed presented to you in 1986. We acknowledge that the plan did not meet the regulatory definition in that treatment occurred downstream of the baghouse. We have since devised a completely new concept in treatment which takes place at the molecular level, upstream of the baghouse, in the cupola expansion chamber quench tank.

TET 382-7917

The process was briefly described to Jim Roberts of your office on March 11, 1988. Previous to that, the process was presented to the EPA on March 9, 1987, in the office of Marcia Williams in Washington. In attendance from the EPA were Dan Derkics, Jim Berlow, Ron Walling, Harry Stumpf, Norm Yewing, and attorney Margret Silver. Their conclusion was that the injection of treatment materials into the airstream before the baghouse, which renders the baghouse emission control dust nonhazardous, would qualify as totally enclosed treatment.

The treatment process is really very simple. The particulate evolves at the cupola melt zone in the form of fume and is transported up the cupola stack by thermal and mechanical movements. At the top of the cupola, the "exhaust" made up of gases and particulate moves into the crossover pipe where they pass through afterburners which combust the carbon monoxide and bring the "exhaust" temperature to 3500 degrees F. From the crossover pipe, the exhaust enters the expansion chamber known as the quench tank. Here the "exhaust" expands, slows down, and is quenched with water sprayed into the stream. It is at this point that we plan to "treat" the "exhaust," rendering it nonhazardous.

The exhaust cools to 500 degrees F in the quench tank and is then transported to the baghouse where the particulate is captured.

By studying the chemistry of the exhaust particulate, we found that we have a lot of free calcium. The calcium comes from the limestone we must add to our charge to insure proper metallurgical properties. By adding an aqueous sodium silicate solution to the "exhaust" stream in the quench tank through a set of dedicated nozzles, we have created a reaction between the calcium, sodium silicate and metallics which renders the previous leachable metallic salts into insoluble metallic silicates which are the identical chemical formula of metallic ores as mined in their natural state.

The treatment process is known extensively in California as the "Furness Process" and has been used successfully in detoxifying nonferrous foundry waste sand and landfills. Currently, two foundries in California are utilizing the process described above to treat their cupola baghouse dust. Attached is a reprint of a California Cast Metals Association paper on sand detoxification; and a CCMA update showing state grants for this process.

Also attached are two laboratory reports showing total metals in the treated baghouse dust and EP toxic leach test results of that same treated dust from our experiment in Iron Mountain; four blueprints showing the treatment spray nozzle detail (D44-29), the existing water spray pumps and solenoids (D44-28), and the entire cupola system (D44-1); and a flow schematic diagram illustrating the treatment process. Your office currently has existing data on the EP toxicity of the untreated baghouse dust; therefore, more of this data was not forwarded.

By way of this introduction, we are looking forward to working with your department to establish our process as totally enclosed. Please inform this office of our next step in the procedure.

Sincerely,

GREDE FOUNDRIES, INC.

David C. Van Dyke
Director of Safety and
Environmental Protection

DCVD:jw/3-16

Attachments

cc: Jim Roberts
Review Engineer - Michigan DNR

CBC ENVIRONMENTAL SERVICES

3/19/87 LABORATORY REPORT PAGE 1

G031 8413407 PAG

GREDE FOUNDRIES, INC.
9898 W BLUEMOUND RD
MILWAUKEE ,WI 53226
ATTN: DAVID VAN DYKE

SAMPLE 87065-G03239 IRON MOUNTAIN AUGER DUST
DATE COLLECTED 3/05/87 DATE RECEIVED 3/06/87

TEST NAME	RESULT	UNITS
CALCIUM - TOTAL	30000	PPM
MAGNESIUM - TOTAL	4700	PPM
CADMIUM - TOTAL	170	PPM
LEAD - TOTAL	9400	PPM

METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, 1979, EPA-600/4-79-020.
TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL/CHEMICAL METHODS, 1982, EPA SW846.
IF YOU HAVE ANY QUESTIONS PLEASE CONTACT OUR CLIENT SERVICE DEPARTMENT.
ANY REMAINING WASTE SAMPLES WILL BE RETURNED TO THE ADDRESS LISTED ABOVE 8 WEEKS FROM THE RECEIVING DATE OF THIS REPORT. WI DNR LAB CERTIFICATION #241283020/A.I.H.A. ACCREDITED.
N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL

CHEM-BIO CORPORATION
140 E. RYAN ROAD *OAK CREEK, WI 53154-4599* *(414) 764-7005 (800) 592-5900 DT 332*

CBC ENVIRONMENTAL SERVICES

4/01/87 LABORATORY REPORT PAGE 1

G031 8413702 PAG

GREDE FOUNDRIES, INC.
9898 W BLUEMOUND RD
MILWAUKEE ,WI 53226
ATTN: DAVID VAN DYKE

SAMPLE 87076-G03239 FOUNDRY WASTE / LOAD 1 / 7:50 A.M.
DATE COLLECTED 3/13/87 DATE RECEIVED 3/17/87

TEST NAME	RESULT	UNITS	EP TOXICITY		EP LIMIT	HAZ.CODE
CALCIUM-EP	110	MG/L				
CADMIUM - EP			0.31	MG/L	1.0	
LEAD - EP			1.3	MG/L	5.0	

METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, 1979, EPA-600/4-79-020.
TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL/CHEMICAL METHODS, 1982, EPA SW846.
IF YOU HAVE ANY QUESTIONS PLEASE CONTACT OUR CLIENT SERVICE DEPARTMENT.
ANY REMAINING WASTE SAMPLES WILL BE RETURNED TO THE ADDRESS LISTED ABOVE 8 WEEKS FROM THE RECEIVING DATE OF THIS REPORT. WI DNR LAB CERTIFICATION #241283020/A.I.H.A. ACCREDITED.
N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL JW

CHEM-BIO CORPORATION
140 E. RYAN ROAD *OAK CREEK, WI 53154-4599* *(414) 764-7005 (800) 592-5900 DT 332*

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 2 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Totally Enclosed Treatment System Proposal
from TDJ Group, Inc.

FROM: Joseph S. Carra, Director
Waste Management Division

TO: David A. Wagoner, Director
Waste Management Division
EPA Region VII

This is in response to your memorandum to Marcia Williams, which has been referred to my division for a response. I have reviewed your request for a determination of the applicability of the totally enclosed treatment (TET) exemption as it applies to the process proposed for generic marketing by TDJ Group, Inc. TDJ Group has claimed confidential business information for the description of their treatment system. You have requested clarification on three issues:

1. whether the TDJ Group's proposal meets the TET exemption;
2. guidance on what parts of the treatment train would be considered TET; and
3. the location at which samples must be taken to demonstrate the success of treatment.

The Agency defines a totally enclosed treatment system in CFR §260.1 as a treatment system that:

1. must be connected to an industrial process; and
2. constructed and operated to prevent the release of hazardous waste and any constituent thereof into the environment during treatment.

In your memorandum, you stated that the TDJ Group's proposal is similiar to the proposal received by Region V for the Grede Foundry. The differences between the TDJ proposal and the Grede Foundry are the location of treatment and the method of collecting emissions dust from the cupola. In the TDJ proposal, treatment occurs between the cupola and the baghouse; while treatment occurs after the baghouse at the Grede Foundry. In the TDJ proposal, the flue dust from the cupola is connected to the treatment system via ducts. In the Grede Foundry, the hood that collects the flue dust was not connected to the cupola but to the baghouse. Because the cupola was open to the environment, the Grede's Foundry treatment system would not qualify for the exemption. In the OSWER directive #9432.00-1, the Agency clarified to Region V that the cupola is part of an industrial production process and that the baghouse is part of a waste treatment process. Therefore, treatment downstream of a baghouse would not qualify for the TET exemption.

The Agency also responded to a letter received by Mr. Swed of RMT, Inc., dated December 22, 1986, requesting guidance on the application of the TET exemption to the treatment prior to the disposal of baghouse dust. In this letter, the Agency restated that cupolas are part of an industrial process while baghouses are part of a treatment process. Any totally enclosed processing that occurs in the ducts directly connecting the cupola to the baghouse would not be treatment subject to the RCRA permitting requirements. However, the baghouse and any treatment downstream of the baghouse would not qualify because the baghouse is open to the environment. This should answer your first and second questions.

Your third question refers to the location at which samples must be taken to demonstrate the success of treatment. Because the treatment system prior to the baghouse qualifies for the TET exemption, the equipment is not subject to the RCRA permitting process. The TDJ Group would have to show, through the design of the treatment system, that the system is totally enclosed. That is, there are no routine leakages of flue dust from the cupola throughout the treatment system. No other sampling is necessary, unless your office believes a sampling program is necessary to assure that no releases occur.

Attached to your memorandum, you have included a detailed description and drawing of the TDJ proposal. Based on our review of the design of the system and our best engineering judgement, the treatment system is totally enclosed because the flue dust from the cupola is transferred through the treatment system via closed ducts. Therefore, there appears to be no possibility of routine releases of the dust to the environment.

In summary, the treatment system prior to the baghouse would qualify for the exemption, but the baghouse and treatment downstream of the baghouse would not qualify for the exemption. In order to determine the effectiveness of the treatment system enclosure, the design of the system must show that the cupola and the treatment train are sealed, thereby preventing routine releases of constituents to the environment. Our review indicates that the TDJ Group design appears to meet these requirements. If your staff has any questions, they should contact Monica Chatmon of my staff on FTS 475-7236.

cc: Marcia Williams
Waste Management Division Directors, Regions I-X

UNI[illegible] STATES EN[illegible]NTAL PROTECT[illegible] AGENCY

MAR 17 1987

MEMORANDUM

SUBJECT: Total Enclosed Treatment and the Steel Industry

FROM: Marcia E. Williams, Director /s/
Office of Solid Waste

TO: James H. Scarbrough
Chief, Residuals Management Branch
Region IV

I have reviewed your memorandum of February 4, 1987, regarding our guidance to RMT, Inc., advising that its baghouse dust treatment system does not meet the requirement of a totally enclosed treatment system. It is unfortunate that Region IV apparently has reviewed a similar facility in Alabama and reached the opposite conclusion. Although I understand your reasoning in that decision, I cannot concur with it. I believe this interpretation would unnecessarily broaden the exemption and create new problems in the definition of what constitutes a treatment unit.

The concept of a totally enclosed treatment unit in 40 CFR §260.10 was designed to prevent the need for a permit for treatment that occurred in pipes exiting a process unit. As a result, this definition made clear that the treatment units must be connected directly to an industrial production process. By not adhering strictly to this principle, your interpretation would broaden the universe of exempt units beyond what was intended for this exemption.

As you note in your memo, the baghouse is not part of the production process. Therefore, as stated in my December 22, 1986, letter to RMT, the dust fixation system cannot be considered directly connected to the process because the baghouse is open to the environment. Although listed waste is not generated until the emission control dust is collected in the baghouse hopper, this does not change the fact that there is an opening between the production unit and the fixation system. I recognize that this

CONCURRENCES								
SYMBOL	FTS	[illegible]	WMD	[illegible]				
SURNAME	Berlow	[illegible]	[illegible]	[illegible]				
DATE	3/4/87	3/6/87	3/6	3/10				

EPA Form 1320-1 (12-70)

OFFICIAL FILE COPY

means that any treatment provided downstream of a baghouse cannot be totally enclosed treatment. To find otherwise, however, would require us to find that the baghouse is a process unit. I think this would hopelessly confuse the definition of treatment units and process units and complicate enforcement by introducing how a unit is used into the definition.

Therefore, I believe that despite its possible environmental advantages, this unit should not be exempted from permitting as a totally enclosed treatment unit. Based on your extensive involvement in the design and construction of this system, I expect permitting will not create an unreasonable barrier to the use of the closed fixation technology on baghouse dusts. Expedited permit review would seem appropriate.

I also would note that treatment in 90-day accumulation units is currently exempt from permitting. Management within 90 days could make this issue moot for the Alabama facility at this time.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 22 1986

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Response to Frederick Swed on Totally Enclosed Treatment

FROM: Marcia E. Williams, Director
Office of Solid Waste

TO: David Stringham, Chief
Solid Waste Branch
Waste Management Division
EPA Region V (5HS-JCK-13)

Please find attached our response on the issue of totally enclosed treatment of foundry baghouse dusts. Because this response clarifies my memo to you of February 11, 1986 (Directive 943200-1), I think you will agree that you should forward it as a clarification to Grede Foundries. This will assure that Grede properly understands our position.

Attachment

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 22 1986

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. Frederick M. Swed, Jr.
RMT, Inc.
Suite 124
1406 East Washington Ave.
Madison, Wisconsin 53703-3009

Dear Mr. Swed:

Thank you for your letter of November 10 requesting guidance on application of the totally enclosed treatment exemption to the treatment prior to disposal of baghouse dust generated in the foundry industry. Your letter addressed a generic case in which an emission control baghouse system and the treatment equipment are directly connected to a cupola furnace through a closed system of ducts. The Agency does not believe that the totally enclosed treatment exemption applies to the system you describe, subject to the conditions described below.

As you stated, totally enclosed treatment is defined in 40 CFR 260.10 as (1) being directly connected to an industrial production process and (2) constructed and operated to prevent the release of hazardous waste and any constituent thereof into the environment during treatment. In addition, the regulatory interpretive letter issued July 27, 1981 to Travenol Laboratories (RIL 84) further clarified what constituted totally enclosed treatment.

In the March 25, 1986 letter from Region 5 to Grede Foundries, EPA found that the specific configuration of the Grede baghouse did not qualify as totally enclosed because the hood collecting emissions was not directly connected to the cupola, only to the baghouse. As part of that determination, EPA stated that a foundry cupola qualifies as an industrial production process, but that the baghouse is an air pollution control device associated with waste treatment prior to disposal.

However, our answer to Grede may have been misleading. Connecting the ductwork to the cupola only fulfills half of the totally enclosed treatment requirement. The question remains as to whether a system that includes a baghouse qualifies as totally enclosed treatment. Since baghouses do not remove 100% of the hazardous constituents, treatment downstream of a baghouse is not part of a totally enclosed treatment train.

You suggested that the baghouse is part of the production process because the cupola cannot be operated without the baghouse. While your system might require modification in order to operate without the baghouse, I do not believe that the baghouse is inherently necessary to the operation of a cupola furnace. In fact, prior to the development of air quality standards, cupolas typically operated without baghouses. Baghouses limit emissions from units subject to Clean Air Act standards. Therefore, the Agency still maintains that the baghouse is not part of a production process, but is associated with waste treatment.

You asked whether adding the treatment reagents prior to the baghouse would qualify as totally enclosed treatment. Since we agree that the point of hazardous waste generation is typically the bottom of the baghouse hoppers, any processing that occurs prior to that point would not be treatment subject to RCRA requirements.

You are also correct in stating that even if a production unit is open to the atmosphere, the unit downstream could still qualify as totally enclosed. As stated in a preamble to the §261.4(c) amendment, "Except for surface impoundments and non-operating units, EPA did not intend to regulate...manufacturing process units in which hazardous wastes are generated." (45 FR 72025, October 30, 1980) In your case, however, the production unit is the cupola, not the baghouse, so treatment that occurs downstream of the baghouse is not totally enclosed treatment.

In summary, although production units may not necessarily prevent releases of constituents to the environment, units downstream may still qualify for the totally enclosed treatment exemption. However, while cupolas are production units, baghouses are not considered to be production processes. Furthermore, baghouses release hazardous waste or constituents thereof to the environment during normal operation as a waste management method. Therefore, dust treatment downstream of a baghouse system directly connected to a cupola does not perform totally enclosed treatment under the Federal program. In addition to this Federal determination, of course, the States would have to be consulted for State hazardous waste and air quality standards that apply to these systems. I apologize for any inconvenience that arose from your reading of the EPA letter to Grede Foundries.

Sincerely,

Marcia Williams
Director
Office of Solid Waste

cc: Hazardous Waste Branch Chief, Region V

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 22 1986

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

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RMT, Inc.
Suite 124
1406 East Washington Ave.
Madison, Wisconsin 53703-3009

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In summary, although production units may not necessarily prevent releases of constituents to the environment, units downstream may still qualify for the totally enclosed treatment exemption. However, while cupolas are production units, baghouses are not considered to be production processes. Furthermore, baghouses release hazardous waste or constituents thereof to the environment during normal operation as a waste management method. Therefore, dust treatment downstream of a baghouse system directly connected to a cupola does not perform totally enclosed treatment under the Federal program. In addition to this Federal determination, of course, the States would have to be consulted for State hazardous waste and air quality standards that apply to these systems. I apologize for any inconvenience that arose from your reading of the EPA letter to Grede Foundries.

Sincerely,

Marcia Williams

Marcia Williams
Director
Office of Solid Waste

cc: Hazardous Waste Branch Chief, Region V

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Sincerely,

Marcia Williams
Director
Office of Solid Waste

cc: Hazardous Waste Branch Chief, Region V

bcc: Hazardous Waste Branch Chiefs, Regions I-IV, VI-X
RCRA/Superfund Hotline
Irene Horner, WTB

RMT INC.

RMT, Inc.
Suite 124
1406 East Washington Ave.
Madison, WI 53703-3009
Phone: 608-255-2134

November 10, 1986

Control
Jack L - OGC concurrence needed
cc Mark Greenw
David

Ms. Marcia Williams, Director
Office of Solid Waste
USEPA
Washington, DC 20460

Dear Ms. Williams:

This letter is to request clarification and guidance from your office on the application of totally enclosed treatment (TET) to cupola emission-control baghouses used in the foundry industry.

Baghouse technology is used by many foundries to control particulate emissions from the metal-melting process carried out in cupolas. The dust collected in the baghouse is often classified as hazardous by virtue of EP Toxicity. When removed from the baghouse, the dust is typically treated on-site (subject to RCRA permitting), or disposed as a hazardous waste at a permitted disposal facility.

For foundries, the alternative to a dry collection system as described above, is a wet "scrubber" system. This process also typically generates a hazardous waste, a wet sludge which is somewhat more difficult to handle. As with a baghouse dust, the sludge can be treated via a permitted on-site process or disposed at a permitted facility.

We believe that, in some cases, the treatment of hazardous baghouse dust can meet the definition of totally enclosed treatment in 40 CFR 260.10 and thus be exempt from RCRA permitting. This requires that the treatment facility is

1. directly connected to an industrial production process; and

2. constructed and operated in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment during treatment.

In a July 27, 1981 letter to Travenol Laboratories, Inc. (copy attached), USEPA provided guidance on the interpretation of the definition of TET. This included the following:

1. The totally enclosed facility must be "completely contained on all sides and pose little or no potential for escape of waste to the environment."

2. The facility must be constructed so that there is no predictable potential for overflows, spills or gaseous emissions.

RECEIVED 11/14

3. As long as one end of a treatment train is integrally connected to a production process, and each unit operation is integrally connected to the other, all qualify for the exemption if they meet the requirement of being "totally enclosed."

The USEPA has also provided an interpretation of TET requirements for a specific cupola/baghouse configuration at Grede Foundries (letter attached). In this case, the USEPA found that the foundry's treatment system would not qualify as totally enclosed because

1. the baghouse was not part of the industrial production process;

2. the cupola was open to the air; and

3. since the cupola was open to the air, downstream treatment units could not be totally enclosed.

Although we are not familiar with the specific design upon which this determination was made, we believe it does not accurately reflect the true nature of many cupola/baghouse systems. We offer the following discussion to put the above concerns in more perspective.

1. The Cupola/Baghouse Is A Production Process

Figure 1 is a schematic drawing for a typical cupola/baghouse configuration. In many designs, emissions from the cupola furnace are diverted through a closed system of ducts directly to a baghouse collection device. Since in this design the cupola cannot be operated without the baghouse, we believe the system constitutes a single production process.

The by-products of this production process are filtered gas and a hazardous dust. Under RCRA, the point of hazardous waste generation is typically the bottom of the baghouse hoppers where dust is removed into containers and/or treatment equipment. Air emissions may also be regulated under the Clean Air Act. Thus, we believe that the application of TET to this production process should be at the point where RCRA regulation would otherwise commence, i.e., at the bottom of the baghouse.

2. Fugitive Losses From The Production Process (i.e., The Cupola/Baghouse) Are Not Relevant To The Application of TET

In many integrated cupola/baghouse systems, the largest and only significant opening to the atmosphere is the charge door to the cupola. Since the charge door is clearly a part of the production process, we do not believe it is relevant to the application of downstream TET. Further

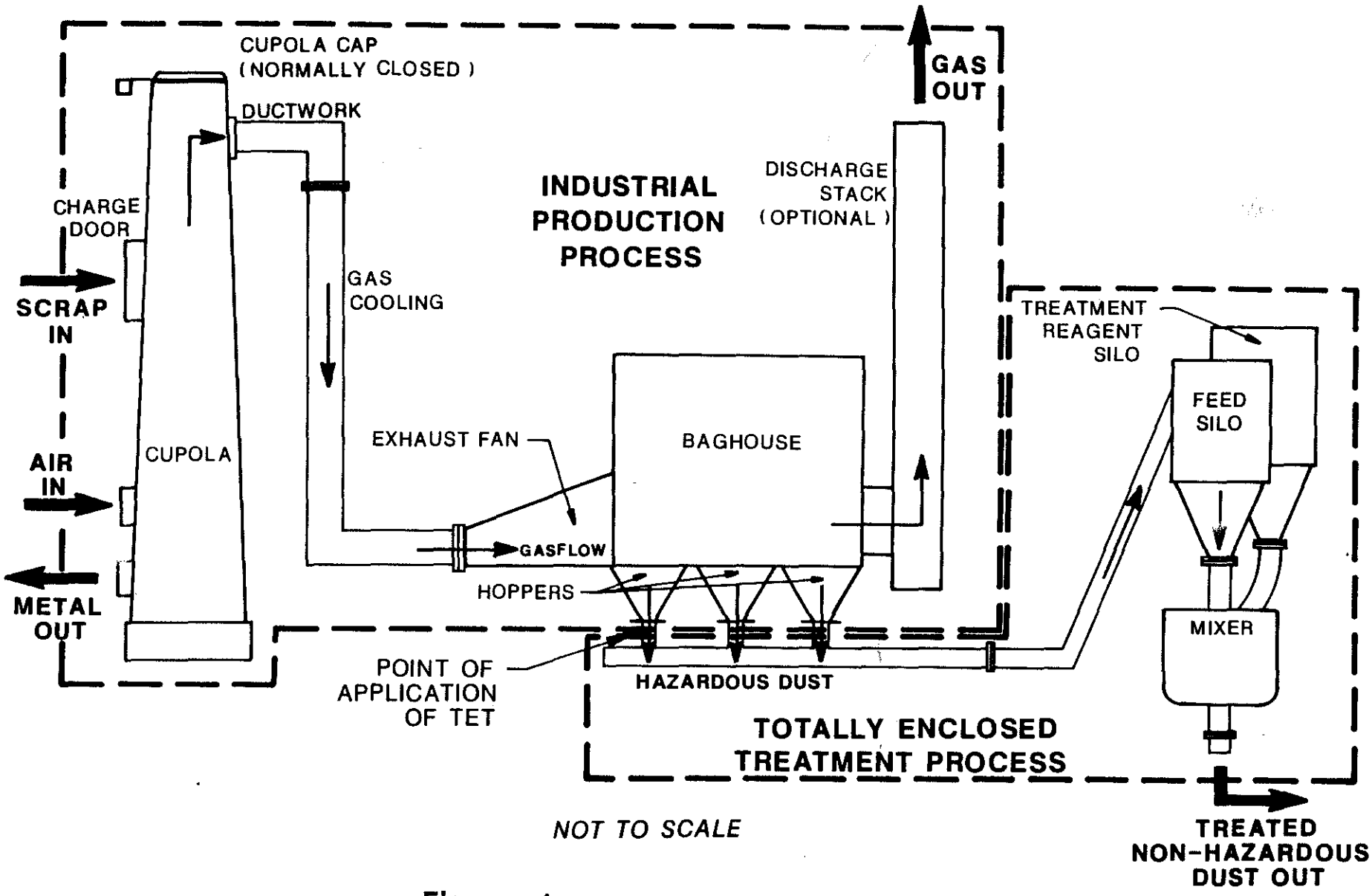

Figure 1

TYPICAL CUPOLA / BAGHOUSE CONFIGURATION WITH ASSOCIATED TREATMENT FACILITIES

RMT INC

Dwn. by:	PPD
Date:	10 / 86
Proj.#	386.01

this part of the cupola, along with downstream ductwork and other devices up to the exhaust fan, are under negative pressure. Any leaks in the system would be mainly inward to the system as opposed to outward to the atmosphere. (During periods of process upset, such as loss of negative pressure, air flow to the cupola is typically cutoff.)

The requirements for TET specify that the treatment process must be totally enclosed, not the production process. Take, for example, the classic example of acid neutralization in a pipe. TET would be applied to the pipe and any other downstream equipment or facilities used for treatment. TET would not be applied to the open plating tank, say, where the acidic waste was first generated.

Many other analogous examples come to mind. Should the criteria for TET be applied to spray degreasing tanks where spent, hazardous solvents are generated? Are the fugitive emissions from a lead-based paint booth which generates EP-Toxic filters to be regulated as hazardous?

In its correspondence with Grede Foundries, the USEPA determined that since the cupola is open to the atmosphere before the baghouse, downstream treatment could not be totally enclosed. We believe that in most cases the ductwork between the cupola and baghouse is not open to the atmosphere. Thus, even though losses during production should not be relevant to TET, the cupola/baghouse (with the exception of the charge door) is substantially enclosed.

3. The Appurtenances To A Baghouse Which Are Used For Treatment Should Be Totally Enclosed

40 CFR 260.10 stipulates that equipment used for TET must prevent the release of hazardous waste to the environment during treatment. The configuration of Figure 1 illustrates that treatment does not take place within the baghouse itself (or the cupola, for that matter). It is possible, however, to construct pipelines, feed silos, and mixers directly to the bottom hopper of the baghouse in such a way as to prevent emissions during the conveyance and treatment of the hazardous dust. We believe this to be a reasonable and appropriate application of TET.

We would like to point out that it is also possible to add a treatment reagent, in a totally enclosed manner, to the cupola/baghouse at some point in the ductwork between the cupola and the baghouse. Under such a configuration, we would then consider the baghouse to be part of the treatment process and therefore subject to the criteria for TET. In fact, we believe that in many cases the TET criteria would be met.

In summary, we believe that totally enclosed treatment for cupola/baghouses, when carefully designed, is fully consistent with RCRA and with good environmental practice. We request input from the Agency on this issue so that we may continue to provide acceptable technical recommendations to clients seeking ways to treat their hazardous waste.

Please call if you have questions.

Sincerely,

F. M. Sued Jr.

Frederick M. Sued, Jr., P.E.
Environmental Process Engineering Department

tfr

Enclosures

[redacted]

RMT INC.

RMT, Inc.
Suite 124
1406 East Washington Ave.
Madison, WI 53703-3009
Phone: 608-255-2134

Control
Jack L - cc: corrections needed
cc Mark Grosnik
David

November 10, 1986

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USEPA
Washington, DC 20460

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RECEIVED 11/14

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Please call if you have questions.

Sincerely,

J. M. Sued Jr.

Frederick M. Sued, Jr., P.E.
Environmental Process Engineering Department

tfr

Enclosures

SMS-JCK-13

29 OCT 1986

Mr. Alan J. Howard
Chief, Technical Services Section
Hazardous Waste Division
Michigan Department of Natural Resources
P.O. Box 30028
Lansing, Michigan 48909

RE: Grede Foundries
MID 005 131 699

Dear Mr. Howard:

This is in response to your comments, on our September 26, 1986, letter regarding Grede Foundries, conveyed via phone conversations between you and myself and our staffs. Our September letter responded to a request from your office received on August 18. Today's letter is a result of these previous discussions and correspondences, and reflects the current status of the facility.

Our review of the two plan sheets, entitled Cupola Dust Collector and General Arrangement Cupola Air Pollution Control System, has determined that adequate information has not been presented to allow us to complete our review. A summary of needed information follows:

1) A process flow diagram, with detailed information on the operation of the cupola and the baghouse, is needed to supplement the plan sheets. No information has been provided on the process flow at the facility and therefore, the plans are unclear on facility operations.

2) Information was not provided on how the hoppers are filled. It is unclear whether these units are closed or open within the baghouse.

3) No information was given on how material is charged to the cupola and if any releases could occur during this activity. An operational description of the automatic cap on the cupola is needed to determine the frequency of its opening and potential for releases from this section of the process.

Without receiving, minimally, this additional information, a decision cannot be made on classifying Grede Foundries as a totally enclosed treatment system.

Regardless, even if a determination could be made on the regulated status of the plans submitted by Grede Foundries, this review could not be used for resolving the issue of totally enclosed treatment systems at other facilities in Michigan. Each determination is site specific, based on each facility's process method and waste treatment and handling procedures.

Sincerely,

Karl E. Bremer, Chief
Technical Programs Section

Attachment

bcc: Michigan Read File

LETTER REVISED 10/24/86

5HS-JCK-13:WMD:SWB:TPS:MICHIGAN:D.SPENCER:J.DAVIS/R.TRAUB:G.WORDS:10/24/86
CORRS: 10/24/86: FINAL 10/27/86
R.TRAUB'S DISK NO. 3 - DOC. NO. 9

letter to typing 10/8/86 (Al Howard def. request)

	TYP.	AUTH.	IL. CHIEF	IN. CHIEF	MI. CHIEF	MN/WI CHIEF	OH. CHIEF	TPS CHIEF	CHIEF	CHIEF
INIT. DATE	10-27-86	10/27/86			10/27/86			10/27/86		

29 OCT 1986

TOTALLY ENCLOSED TREATMENT FACILITY

Regulatory Clarification

I. Issue: From questions asked since promulgation of the regulations on May 19, 1980, it is clear that the definition and practical application of the term "totally enclosed treatment facility" require clarification.

II. Discussion: The definition appears in §260.10(a) as follows:

> Totally enclosed treatment facility means a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment during treatment. An example is a pipe in which waste acid is neutralized.

A facility meeting this definition is exempted from the requirements of Parts 264 and 265 (See §§264.1(g)(5) and 265.1(c)(9)) and, by extension, the owner or operator of that facility need not notify nor seek a permit for that process. The purpose of this provision is to remove from active regulation those treatment processes which occur in close proximity to the industrial process which generates the waste and which are constructed in such a way that there is little or no potential for escape of pollutants. Such facilities pose negligible risk to human health and the environment.

The part of the definition which has generated the most uncertainty is the meaning of "totally enclosed." The Agency intends that a "totally enclosed" treatment facility be one which is completely contained on all sides and poses little or

no potential for escape of waste to the environment even during periods of process upset. The facility must be constructed so that no predictable potential for overflows, spills, gaseous emissions, etc., can result from malfunction of pumps, valves, etc., associated with the totally enclosed treatment or from a malfunction in the industrial process to which it is connected. Natural calamities or acts of sabotage or war (earthquakes, tornadoes, bombing, etc.) are not considered predictable, however.

As a practical matter, the definition limits "totally enclosed treatment facilities" to pipelines, tanks, and to other chemical, physical, and biological treatment operations which are carried out in tank-like equipment (e.g., stills, distillation columns, or pressure vessels) and which are constructed and operated to prevent discharge of potentially hazardous material to the environment. This requires consideration of the three primary avenues of escape: leakage, spills, and emissions.

To prevent leaking, the tank, pipe, etc., must be made of impermeable materials. The Agency is using the term impermeable in the practical sense to mean no transmission of contained materials in quantities which would be visibly apparent. Further, as with any other treatment process, totally enclosed treatment facilities are subject to natural deterioration (corrosion, etc.) which could ultimately result in leaks. To meet the requirement in the definition that treatment be conducted

". . . in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment . . . ," the Agency believes that an owner or operator claiming the exemption generally will have to conduct inspections or other discovery activities to detect deterioration and carry out maintenance activities sufficient to remedy it. A tank or pipe which leaks is not a totally enclosed facility. As a result, leaks must be prevented from totally enclosed facilities or the facility is in violation of the regulations.

A totally enclosed facility must be enclosed on all sides. A tank or similar equipment must have a cover which would eliminate gaseous emissions and spills. However, many tanks incorporate vents and relief valves for either operating or emergency reasons. Such vents must be designed to prevent overflows of liquids and emissions of harmful gases and aerosols, where such events might occur through normal operation, equipment failure, or process upset. This can often be accomplished by the use of traps, recycle lines, and sorption columns of various designs to prevent spills and gaseous emissions. If effectively protected by such devices, a vented tank would qualify as a totally enclosed treatment facility.

When considering protective devices for tank vents, the question arises as to whether the protective device is itself adequate. The test involves a judgment as to whether the overflow or gaseous emission passing through the vent will be

prevented from reaching the environment. For example, an open catchment basin for overflows is not satisfactory if the hazardous constituents in the waste may be emitted to the air. Similarly, it may also not be satisfactory if it is only large enough to hold the tank overflow for a brief period before it also overflows. However, even in this situation, alarm systems could be installed to ensure that the capacity of the catchment basin is not exceeded. Where air emissions from vents or relief valves are concerned, if the waste is non-volatile or the emissions cannot contain gases or aerosols which could be hazardous in the atmosphere, then no protective devices are necessary. An example might be a pressure relief valve on a tank containing non-volatile wastes. Where potentially harmful emissions could occur, then positive steps must be taken. For example, the vent could be connected to an incinerator or process kiln. Alternately, a sorption column might be suitable if emission rates are low, the efficiency of the column approaches 100 percent, and alarms or other safeguards are available so that the upset causing the emission will be rectified before the capacity of the column is exceeded. Scrubbers will normally not be sufficient because of their tendency to malfunction and efficiencies typically do not approach 100 percent.

Tanks sometimes have floating roofs. To be eligible as a totally enclosed facility, such tanks should be constructed so that the roof has a sliding seal on the side which is designed

to prevent gaseous emissions and protect against possible overflow.

The part of the definition requiring that totally enclosed treatment facilities be "directly connected to an industrial production process" also generates some uncertainty. As long as the process is integrally connected via pipe to the production process, there is no potential for the waste to be lost. The term "industrial production process" was meant to include only those processes which produce a product, an intermediate, a byproduct, or a material which is used back in the production process. Thus, a totally enclosed treatment operation, integrally connected downstream from a wastewater treatment lagoon would not be eligible for the exemption because the process to which it is connected is not an "industrial production process." Neither would any totally enclosed treatment process at an off-site hazardous waste management facility qualify, unless it were integrally connected via pipeline to the generator's production process. Obviously, a waste transported by truck or rail is not integrally connected to the production process.

Hazardous waste treatment is often conducted in a series of unit operations, each connected by pipe to the other. As long as one end of a treatment train is integrally connected to a production process, and each unit operation is integrally connected to the other, all qualify for the exemption if they meet the requirement of being "totally enclosed." If one unit operation is not "totally enclosed" or is not "integrally connected,"

then only unit operations upstream from that unit would qualify for the exemption. The unit and downstream process would require a permit.

The device connecting the totally enclosed treatment facility to the generating process will normally be a pipe. However, some pipes (e.g., sewers) are constructed with manholes, vents, sumps, and other openings. Pipes with such openings may qualify as totally enclosed only if there is no potential for emissions or overflow of liquids during periods of process upset, or if equipment (sorption columns, catchment basisn, etc.) has been installed to prevent escape of hazardous waste or any potentially hazardous constituent thereof to the environment.

This exemption for totally enclosed treatment facilities applies only to the facility itself. The effluent from that facility may still be regulated. If the waste entering the totally enclosed treatment facility is listed in Subpart D of Part 261, then the effluent from the facility is automatically a hazardous waste and must be treated as such, unless it is "delisted" in accordance with §§260.20 and 260.22. If, on the other hand, the waste entering the totally enclosed treatment facility is hazardous because it meets one of the characteristics described in Subpart C of Part 261, then the effluent waste is a regulated hazardous waste only if the effluent meets one of the characteristics. Since the totally enclosed treatment facility is exempted from the regulatory requirements, it is only the effluents from such processes which are of interest

to the Agency. Thus, whether the waste in a totally enclosed treatment facility must be considered towards the 1000 kg/month small quantity generator limit, depends on whether it is a regulated hazardous waste as it exits the totally enclosed treatment facility.

Finally, it is important to note that if the effluents from a totally enclosed treatment facility are discharged to a surface water body (lake or stream) or to a publicly owned treatment works or sewer line connected thereto, then these wastes are not subject to the RCRA hazardous waste controls at all but are, instead, subject to the Clean Water Act and regulations promulgated thereunder (See 45 FR 76075).

III. Resolution: In sum, a "totally enclosed treatment facility" must:

(a) Be completely contained on all sides.

(b) Pose negligible potential for escape of constituents to the environment except through natural calamaties or acts of sabotage or war.

(c) Be connected directly by pipeline or similar totally enclosed device to an industrial production process which produces a product, byproduct, intermediate, or a material which is used back in the process.

29 OCT 1986

RECEIVED
JAN 14 1985
WASTE MANAGEMENT BRANCH

TOTALLY ENCLOSED TREATMENT FACILITY

Regulatory Clarification

I. Issue: From questions asked since promulgation of the regulations on May 19, 1980, it is clear that the definition and practical application of the term "totally enclosed treatment facility" require clarification.

II. Discussion: The definition appears in §260.10(a) as follows:

> Totally enclosed treatment facility means a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment during treatment. An example is a pipe in which waste acid is neutralized.

A facility meeting this definition is exempted from the requirements of Parts 264 and 265 (See §§264.1(g)(5) and 265.1(c)(9)) and, by extension, the owner or operator of that facility need not notify nor seek a permit for that process. The purpose of this provision is to remove from active regulation those treatment processes which occur in close proximity to the industrial process which generates the waste and which are constructed in such a way that there is little or no potential for escape of pollutants. Such facilities pose negligible risk to human health and the environment.

The part of the definition which has generated the most uncertainty is the meaning of "totally enclosed." The Agency intends that a "totally enclosed" treatment facility be one which is completely contained on all sides and poses little or

no potential for escape of waste to the environment even during periods of process upset. The facility must be constructed so that no predictable potential for overflows, spills, gaseous emissions, etc., can result from malfunction of pumps, valves, etc., associated with the totally enclosed treatment or from a malfunction in the industrial process to which it is connected. Natural calamities or acts of sabotage or war (earthquakes, tornadoes, bombing, etc.) are not considered predictable, however.

As a practical matter, the definition limits "totally enclosed treatment facilities" to pipelines, tanks, and to other chemical, physical, and biological treatment operations which are carried out in tank-like equipment (e.g., stills, distillation columns, or pressure vessels) and which are constructed and operated to prevent discharge of potentially hazardous material to the environment. This requires consideration of the three primary avenues of escape: leakage, spills, and emissions.

To prevent leaking, the tank, pipe, etc., must be made of impermeable materials. The Agency is using the term impermeable in the practical sense to mean no transmission of contained materials in quantities which would be visibly apparent. Further, as with any other treatment process, totally enclosed treatment facilities are subject to natural deterioration (corrosion, etc.) which could ultimately result in leaks. To meet the requirement in the definition that treatment be conducted

". . . in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment . . . ," the Agency believes that an owner or operator claiming the exemption generally will have to conduct inspections or other discovery activities to detect deterioration and carry out maintenance activities sufficient to remedy it. A tank or pipe which leaks is not a totally enclosed facility. As a result, leaks must be prevented from totally enclosed facilities or the facility is in violation of the regulations.

A totally enclosed facility must be enclosed on all sides. A tank or similar equipment must have a cover which would eliminate gaseous emissions and spills. However, many tanks incorporate vents and relief valves for either operating or emergency reasons. Such vents must be designed to prevent overflows of liquids and emissions of harmful gases and aerosols, where such events might occur through normal operation, equipment failure, or process upset. This can often be accomplished by the use of traps, recycle lines, and sorption columns of various designs to prevent spills and gaseous emissions. If effectively protected by such devices, a vented tank would qualify as a totally enclosed treatment facility.

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Hazardous waste treatment is often conducted in a series of unit operations, each connected by pipe to the other. As long as one end of a treatment train is integrally connected to a production process, and each unit operation is integrally connected to the other, all qualify for the exemption if they meet the requirement of being "totally enclosed." If one unit operation is not "totally enclosed" or is not "integrally connected,"

then only unit operations upstream from that unit would qualify for the exemption. The unit and downstream process would require a permit.

The device connecting the totally enclosed treatment facility to the generating process will normally be a pipe. However, some pipes (e.g., sewers) are constructed with manholes, vents, sumps, and other openings. Pipes with such openings may qualify as totally enclosed only if there is no potential for emissions or overflow of liquids during periods of process upset, or if equipment (sorption columns, catchment basisn, etc.) has been installed to prevent escape of hazardous waste or any potentially hazardous constituent thereof to the environment.

This exemption for totally enclosed treatment facilities applies only to the facility itself. The effluent from that facility may still be regulated. If the waste entering the totally enclosed treatment facility is listed in Subpart D of Part 261, then the effluent from the facility is automatically a hazardous waste and must be treated as such, unless it is "delisted" in accordance with §§260.20 and 260.22. If, on the other hand, the waste entering the totally enclosed treatment facility is hazardous because it meets one of the characteristics described in Subpart C of Part 261, then the effluent waste is a regulated hazardous waste only if the effluent meets one of the characteristics. Since the totally enclosed treatment facility is exempted from the regulatory requirements, it is only the effluents from such processes which are of interest

to the Agency. Thus, whether the waste in a totally enclosed treatment facility must be considered towards the 1000 kg/month small quantity generator limit, depends on whether it is a regulated hazardous waste as it exits the totally enclosed treatment facility.

Finally, it is important to note that if the effluents from a totally enclosed treatment facility are discharged to a surface water body (lake or stream) or to a publicly owned treatment works or sewer line connected thereto, then these wastes are not subject to the RCRA hazardous waste controls at all but are, instead, subject to the Clean Water Act and regulations promulgated thereunder (See 45 FR 76075).

III. Resolution: In sum, a "totally enclosed treatment facility" must:

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(c) Be connected directly by pipeline or similar totally enclosed device to an industrial production process which produces a product, byproduct, intermediate, or a material which is used back in the process.

5HS-JCK-13, S.W.

SEP 26 1986

Alan J. Howard, Chief
Technical Services Section
Hazardous Waste Division
Michigan Department of Natural Resources
P.O. Box 30028
Lansing, Michigan 48909

RE: Grede Foundries
MID 006 131 890

Dear Mr. Howard:

On August 18, 1986, our office received a request to review and determine the regulated status of the above referenced facility. Engineering plans were submitted by the facility for concurrent review by both Agencies. Previously submitted plans had failed to qualify the operations proposed as a totally enclosed treatment facility.

On June 27, 1986, the company submitted a second set of plans for another concurrent review. However, on August 18, 1986, Mr. Dave VanDyke, of Grede Foundries, contacted Diane M. Spencer of my staff, stating that the facility did not wish U.S. EPA to review the engineering plans submitted. The facility presently desires to be regulated as a generator, treating waste in its accumulation tanks. Consequently, no final decision was made on the totally enclosed treatment issue.

The request to be regulated as a generator only has not been granted by U.S. EPA due to lack of information.

If you have any questions regarding this matter, please contact Diane M. Spencer of my staff, at (312) 886-3740.

Sincerely,

Karl E. Bremer, Chief
Technical Programs Section

bcc: Michigan Unit Read

5HS-JCK-13:WMD:SWB:TPS:MI:D.SPENCER:G.WORDS:DRAFT IN 9/19 DRAFT TYPE 9/22 (gw)
CORRS: 9/22/86 (GW) FINAL: 9/23/86
DISK NO. 2 - DOC. NO. 16

9/24/86

	TYP.	AUTH.	IL. CHIEF	IN. CHIEF	MI. CHIEF	MN/WI CHIEF	OH. CHIEF	TPS CHIEF	WMB CHIEF	WMD DIR
INIT. DATE	9/23/86	9/23/86			9/24/86			9/26/86		

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

~~RONALD O. SKOOG, Director~~

Gordon E. Guyer, Director

Roscommon, Michigan 48653
Region II
August 13, 1986

SAFETY
AUG 18 1986

RECEIVED
AUG 22 1986
U.S. EPA, REGION V

Dave VanDyke
Grede Foundries, Inc.
P.O. Box 26499
Milwaukee, Wisconsin 53226

Dear Mr. VanDyke:

On July 5, 1986, acting as representatives of the U.S. EPA, John Bohunsky and I inspected your facility located in Kingsford. The purpose of this inspection was to determine compliance with the Hazardous Waste Regulations of Subtitle C of the Federal Resource Conservation and Recovery Act (RCRA) of 1976.

The company would now be considered a generator, since it treats only its own waste in a container. The company should notify EPA in Chicago that their status has changed from a treatment facility to that of a generator.

The deficiencies noted during the inspection were corrected as stated in the company's July 17, 1986, letter. At the present time, the company appears to be in substantial compliance with the regulations that were reviewed.

Should you have any additional questions concerning your hazardous waste management program, please contact this office.

Sincerely,

Thomas M. Polasek
District Supervisor
HAZARDOUS WASTE DIVISION
(517) 275-5151

TMP:plc

cc EPA
Roberts

COMMENTS:

Grede Foundries is located in Kingsford. The company produces grey iron castings for the automotive industry and for construction machinery.

Hazardous waste generated at the site is from the air emission system. The baghouse dust is EP toxic for lead and cadmium. The material is mixed in a cement mixer with spent foundry sand. The company is presently providing analytical data to document that this mixing is legitimate treatment.

The treated hazardous waste is disposed in an unlicensed fill area owned by Basil Smeester.

The company is treating their own waste in a container so they are not subject to permitting under RCRA. Act 64 still applies.

The company is attempting to get a final determination on the design of a totally enclosed treatment system so an Act 64 permit is not required.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 17 1986

OFFICE OF
SOLID WASTE AND EMERGENCY

MEMORANDUM

SUBJECT: On-site Treatment

FROM: Marcia Williams, Director
Office of Solid Waste

RECEIVED
JUN 25 1986
HAZARDOUS W

TO: Harry Seraydarian, Director
Toxics and Waste Management Division,
Region IX

The purpose of this memo is to respond to your April 9, 1986, request for clarification of a recent statement with respect to permitting of treatment activities occurring in a generator's accumulation tanks or containers.

As noted in your memo, the preamble to the final small quantity generator regulations promulgated on March 24, 1986, states that "... no permitting would be required if a generat chooses to treat their hazardous waste in the generator's accumulation tanks or containers in conformance with the requirements of Section 262.34 and J or I of Part 265." This interpretation is applicable to all generators subject to Sec 262.34.

This statement is based upon a legal interpretation of the existing rules allow at this point in time rather than a deliberate and significant shift in Agency policy with respect to accumulation or treatment. The preamble discussion contin "Nothing in Section 262.34 precludes a generator from treat waste when it is in an accumulation tank or container co that provision (emphasis added)." The interpretation is predicated on the fact that the Agency has allowed certain ty of storage to occur at generation sites (i.e., accumulation f periods of 90, 180, or 270 days, depending on generator type without the requirement for permitting or interim status. Sin the Agency has never developed standards specific to treatmen in tanks and containers, the same technical standards applic to such storage (i.e., Subpart I or J of Part 265) would als be applicable to treatment.

In choosing to communicate this legal interpretation in the small quantity generator final rule, OSW sought to avoid forcing small firms to stop conducting beneficial treatment of small quantities of hazardous waste in their accumulation tanks and containers by requiring them to either cease treatment or expend significant resources to obtain a RCRA permit. We do not believe that allowing some treatment to occur while wastes are being accumulated prior to subsequent management, in full compliance with applicable tank or container standards, is currently prohibited under the existing regulatory scheme.

With respect to the limits of treatment which may occur without a permit on-site, this legal interpretation only applies to treatment occurring in a generator's own accumulation tanks or containers subject to, and in compliance with, Section 262.34. This means that the tank or container in which treatment occurs must be appropriately marked with the date the accumulation period began, the tank or container must be completely emptied every 90 days (or 180/270 days for generators of 100-1000 kg/mo), and must be operated in strict compliance with Subparts I or J of Part 265. Any amendments to these Subparts which may be promulgated in the future would also apply. Treatment in other than tanks or containers (e.g., incineration, land treatment or treatment in surface impoundments) would continue to require a permit.

We would expect that generators that treat hazardous waste on-site in tanks or containers and who have obtained interim status, a full permit, or have a Part B application pending might wish to exit the permit process on the basis of this interpretation. Since such on-site treatment without a permit has never been legally precluded under RCRA, those who now wish to avail themselves of this interpretation may do so, provided they comply with all applicable rules respecting withdrawal of permit applications. If however, a unit that now qualifies for Section 262.34 has, in the past, been subject to regulation because it did not qualify for the Section 262.34 exemption, the Region should determine whether the unit has residual obligations under Part 264 or 265 (e.g., closure requirements). In addition, the fact that such a unit was once under interim status provides a basis for action under Section 3008(h), where appropriate.

However, we would caution these generators, as well as those who may wish to alter their accumulation practices in order to conduct treatment without a permit, not to rely upon the continued existence of this legal interpretation in making process changes requiring substantial capital outlays. Specifically, OSW is now considering publication

of an advanced notice of proposed rulemaking that would seek comment on a number of issues related to the 90/180/270 day accumulation provisions. Should the Agency decide at some time in the future to either modify the 90 day accumulation rule in some manner or to write specific standards for treatment, the obligations of generators with respect to treatment in accumulation tanks could change.

cc: Regional Division Directors
Eileen Claussen
Bruce Weddle
Jack Lehman

XXXXXXXXXXXXXXXXXXX

Gordon E. Guyer, Director

Roscommon, Michigan 48653
Region II
August 8, 1986

Dave Van Dyke
Grede Foundries, Inc.
P.O. Box 26499
Milwaukee, WI 53226

Dear Mr. Van Dyke:

Enclosed is a copy of the closure plan completeness checklist that you requested in your letter dated July 18, 1986. This checklist deals with the RCRA regulations which have been adopted by reference in Rule 299.9613 of the Act 64 Rules.

Also, enclosed is a copy of Act 641 of 1978, the Michigan Solid Waste Management Act and its administrative rules. The sections pertaining to closure have been highlighted per your request. The copy of Marcia Williams' memo on totally enclosed is enclosed as you have requested.

Should you have any questions, please contact this office.

Sincerely,

Thomas M. Polasek
District Supervisor
HAZARDOUS WASTE DIVISION
(517) 275-5151

TMP:plc

cc Roberts
EPA
Bohunsky
Olsen

CONVERSATION RECORD

TIME: 2:10pm | DATE: 8-18-86

TYPE: ☐ VISIT ☐ CONFERENCE ☒ TELEPHONE ☒ INCOMING ☐ OUTGOING

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU	ORGANIZATION (Office, dept., bureau, etc.)	TELEPHONE NO.
Dave Van Dyke	Diede Foundries	414 257-3600

SUBJECT: Diede Foundries
MID 006 131 890

ROUTING	
NAME/SYMBOL	INT

SUMMARY

Mr. Van Dyke called to say that Region 9 has approved their design as a totally enclosed treatment system. This was relayed to them by copy of memo (dated June 17, 1986) from Marcia Williams to Region 9. It stated that Maria W. wrote Region V in Feb. of 1986 to say the system did not meet the definition. He is copying me on the Region 9 memo. Tom Polasek (MDNR) stated that on the basis of the Region 9 memo, they should be generators only. Van Dyke said to disregard the June 26, 1986 plans and he will copy me on the Region 9 memo.

ACTION REQUIRED

await additional info.

NAME OF PERSON DOCUMENTING CONVERSATION	SIGNATURE	DATE
D. M. Spencer	D. M. Spencer	8-18-86

ACTION TAKEN

IATURE	TITLE	DATE

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING
BOX 30028
LANSING, MI 48909

XXXXXXXXXXXXXXXX
Gordon E. Guyer, Director

August 11, 1986

Mr. Richard Traub, Chief
Michigan Permit Unit
Solid Waste Branch
US EPA - Region 5
230 South Dearborn Street, 5HS-JCK-13
Chicago, Illinois 60604

Dear Mr. Traub:

The MDNR has been working with Grede Foundries, and other foundries around the State of Michigan, to determine whether they meet the qualifications for a totally enclosed treatment exemption listed under 40 CFR 270.1(C)(2)(iv). The facility is a foundry that operates two cupolas which draw air, by a forced air system, through a quencher unit and a Harsell Bag House by means of duct work. The particulate matter collected in the bag house is hazardous due to EP Toxic levels of lead and cadmium.

On July 3, 1986, the Hazardous Waste Division (HWD) received a drawing entitled Cupola Dust Collector and on July 25, 1986, the HWD received a drawing entitled General Arrangent Cupola Air Pollution Control System. This information was submitted by the company because they disagreed with Marcia Williams' February 11, 1986, memo which said the Grede treatment system did not meet the "Totally Enclosed" exemption criteria.

Since the State of Michigan is not yet authorized to administer RCRA rules, we are requesting a final decision from your agency concerning whether Grede qualifies for the totally enclosed treatment exemption. Your decision will resolve the same issue at several similar facilities, so an expeditious review will be appreciated. Please do not hesitate to contact me if you have any questions.

Sincerely,

James D. Roberts

James D. Roberts
Environmental Engineer
Technical Services Section
Hazardous Waste Division
517-373-2730

cc: Mr. Al Howard
Mr. Ken Burda/C&E File
Mr. Tom Polasek

GREDE FOUNDRIES, INC.

GENERAL OFFICES
P.O. BOX 26499
MILWAUKEE, WISCONSIN 53226-0499
TELEPHONE (414) 257-3600

GRAY IRON
IRON MOUNTAIN FOUNDRY-KINGSFORD, MICHIGAN
ROBERTS FOUNDRY CO., INC.-GREENWOOD, SOUTH CAROLINA
DUCTILE IRON
LIBERTY FOUNDRY-WAUWATOSA, WISCONSIN
REEDSBURG FOUNDRY-REEDSBURG, WISCONSIN
WICHITA FOUNDRY-WICHITA, KANSAS
STEEL
MILWAUKEE STEEL FOUNDRY-MILWAUKEE, WISCONSIN
SPECIAL SERVICES
SHORT RUN SPECIALTY FOUNDRY-MILWAUKEE, WISCONSIN
TOOLING CENTER-MILWAUKEE, WISCONSIN
MIDLAND METAL TREATING-FRANKLIN, WISCONSIN

July 17, 1986

Ms. Diane Spencer
US EPA
Region 5
230 South Dearborn Street
Chicago, IL 60604

Dear Ms. Spencer:

RE: TOTALLY ENCLOSED TREATMENT OF CUPOLA EMISSIONS CONTROL DUST - GREDE FOUNDRIES, IRON MOUNTAIN, MICHIGAN

This letter follows my June 26, 1986, submittal of blueprint plans of our totally enclosed treatment system. In earlier dealings on this subject with Ms. Kim of your office, I was informed that our design concepts would be addressed expeditiously.

I am aware that Ms. Kim left employment at EPA and that this resulted in some delay, but the future direction of Grede Foundries' waste handling operations rest upon your evaluation.

Please complete your evaluation of our design as quickly as possible and report your approval and recommendations to this office.

Sincerely,

GREDE FOUNDRIES, INC.

David C. Van Dyke
Director of Safety and
Environmental Protection

DCVD:lrt/TH/15
cc: Thomas M. Polasek
M DNR
P. O. Box 128
8717 N. Roscommon Road
Roscommon, MI 48653

5HS-JCK-13:WMD:SWB:TPS:MICHIGAN
R.KIM P 602 533 474
GREDE FOUNDRIES, INC.
MID 006 131 890

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to DAVID C. VAN DYKE
Street and No. GREDE FOUNDRIES, INC.
P.O., State and ZIP Code P. O. BOX 26499, MILWAUKEE, WI 53226
Postage $ .22
Certified Fee .75
Special Delivery Fee
Restricted Delivery Fee
Return Receipt Showing to whom and Date Delivered .70
Return receipt showing to whom, Date, and Address of Delivery
TOTAL Postage and Fees $ 1.67
Postmark or Date

PS Form 3800, Feb. 1982 ★ U.S.G.P.O. 1983-403-517

PS Form 3811, July 1983 447-845

SENDER: Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. ☐ Show to whom, date and address of delivery.
2. ☐ Restricted Delivery.

3. Article Addressed to:
MR. DAVID C. VAN DYKE, DIRECTOR OF SAFETY AND ENVIRONMENTAL PROTECTION
GREDE FOUNDIRES, INC. PO. BOX 26499
MILWAUKEE, WI 53226

4. Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Article Number
P 602 533 474

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X

7. Date of Delivery

8. Addressee's Address *(ONLY if requested and fee paid)*

DOMESTIC RETURN RECEIPT

5HS-JCK-13

16 JUL 1986

CERTIFIED MAIL P#602 533 474
RETURN RECEIPT REQUESTED

Mr. David C. Van Dyke
Director of Safety and
Environmental Protection
Grede Foundries, Inc.
P.O. Box 26499
Milwaukee, WI 53226

RE: Iron Mountain Foundry
Kingsford, Michigan
MID 006 131 890

Dear Mr. Van Dyke:

I am writing in response to your June 4, 1986, letter regarding the landfilling of your treated cupola baghouse dust which exhibits the characteristic of EP toxicity for cadmium and lead prior to treatment.

As discussed in your telephone conversation with Ms. Randi Kim of my staff, on June 19, 1986, the treated waste is not a hazardous waste provided that it does not exceed the maximum concentration of cadmium and lead specified in Table I, 40 CFR 261.24(b). Each batch of treated waste should be tested for EP toxicity to ensure that the limits are not exceeded, since the lead and cadmium content in the baghouse dust changes considerably over time.

The decision to ban your waste from being disposed in a type III (non-hazardous) landfill was made by the Michigan Department of Natural Resources (MDNR). This is not a Resource Conservation and Recovery Act (RCRA) regulated unit. Therefore, please contact the MDNR if you wish to dispute this issue. The MDNR permit writer assigned to your facility is Mr. James Roberts. He may be reached at (517) 373-2730.

Sincerely,

Karl E. Bremer, Chief
Technical Programs Section

cc: Alan J. Howard, MDNR
James Roberts
bcc: MI Read File

D. Spencer ✓

5HS-JCK-13:WMD:SWB:TPS:MI:~~R.Kim~~:G.Words:DRAFT 6/24/86:FINAL 6/27/86
SEE CORRECTION DISK #1 CORR 7/9-7/14 GEN WORDS

Rep 7/16/86

	TYP.	AUTH.	IL. CHIEF	IN. CHIEF	MI. CHIEF	MN/WI CHIEF	OH. CHIEF	TPS CHIEF	WMB CHIEF	WMD D...
INIT.	J.W.	NMS			RJV			KEB		
DATE	7-15-86	7-15-86			7/16/86			7/16/86		

MID 006 131 890

xxxxxxxxxxxxxxx
Gordon E. Guyer, Director

Roscommon, Michigan 48653
Region II
July 9, 1986

David C. VanDyke
Grede Foundries, Inc.
P.O. Box 26499
Milwaukee, Wisconsin 53226

Dear Mr. VanDyke:

Attached is a copy of a memo from Al Howard to me dated July 1, 1986, concerning the June 24, 1986, meeting in Lansing. The memo outlines our concerns and lists specific steps necessary to resolve the situation.

Also enclosed is a memo dated July 7, 1986, written by Phil Roycraft addressing EPA's new interpretation concerning on-site treatment. This interpretation would exempt the company from permitting by EPA if the cement truck meets the definition of a container and wastes were treated within the 90 days. Regulations may change to require a permit sometime in the future; however, the company will still need a Michigan Act 64 operating license.

The completely enclosed treatment unit exemption for your facility is still under review. Resolution of this issue with Lansing and EPA is expected shortly.

Should you have any questions, please contact this office.

Sincerely,

Thomas M. Polasek
District Supervisor
HAZARDOUS WASTE DIVISION
(517) 275-5151

TMP:plc

cc EPA
Roberts
Bohunsky

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

July 1, 1986

TO: Tom Polasek, District Supervisor
Compliance Section

FROM: Al Howard, Chief
Technical Services Section

SUBJECT: Grede Foundry

The following represents my thoughts on the text of the letter that should be sent to Grede concerning our recent meeting with Senator Nagel and the company.

The purpose of this letter is to summarize the items discussed and the conclusions reached at our June 24, 1986 meeting.

The company must demonstrate whether its hazardous waste treatment process chemically binds the hazardous constituents in its waste (or otherwise renders them non-hazardous) or whether the treatment process just constitutes dilution. The treatment information provided by the company compared averaged waste composition data to averaged treated waste quality data, and, therefore, it did not present a scientifically valid evaluation of the performance of the existing treatment process.

Since the concentration of hazardous constituents in the waste fluctuates substantially due to the nature of the scrap metal being smelted, our agency would like the company to assess the effectiveness of its treatment by first collecting three representative samples of its hazardous waste stream prior to treatment - one when the amount of hazardous constituents is at a high level, one when they are at an intermediate level, and one when they are at a low level. These samples should then be analyzed for lead and cadmium utilizing total metals, EP toxicity, and ASTM water leach methodologies. After characterization, a portion of each original waste sample should be treated at various mix ratios. Five or six would be acceptable and they should bracket the 6:1 ratio currently being used. Each of the treated mixtures should then be analyzed again for lead and cadmium using the same three test procedures. The clay mixture should also be analyzed for phenol, formaldehyde, and any other organics likely to be present.

This protocol should be used to validate both your existing sand/clay treatment process and your proposed lime treatment process.

We also urge you to have your consultant prepare a detailed waste treatment evaluation protocol based upon the general concepts presented above and submit it for our review. This will insure that the data produced will be adequate to answer all of our agency's questions. Assuming your

laboratory testing will be able to demonstrate that your existing sand/clay and proposed lime treatment processes provide legitimate treatment as defined under 1979 P.A. 64, as amended, it will then be necessary for you to develop an operations plan to insure that your full scale operation consistently generates the same degree of treatment as is demonstrated in the laboratory.

The data that you initially provided to justify your treatment process showed that, on several occasions, you illegally sent material which was still hazardous after treatment to a disposal facility which is not licensed under the state Hazardous Waste Management Act. This is a significant violation and steps must be taken to insure that all loads sent off-site are first rendered non-hazardous.

The operations plan that you develop should incorporate frequent testing of the baghouse dust for total metals. This test is quicker and less expensive than the EP toxicity protocol and it can be used to identify fluctuations in the amount of lead and cadmium in your waste. By using total metals testing to monitor the concentrations of hazardous constituents in your waste, you will be able to identify the three composition points where waste treatment verification must be performed and you will also be in a better position to establish the appropriate amount of treatment reagents needed to assure proper treatment. The operations plan should also address the mixing time required to accomplish treatment, a testing program for analyzing the treated product prior to shipment off-site to insure that it is no longer hazardous and a testing program on the sand/clay mixture for organics and any other parameters critical to the effectiveness of the treatment process.

If, after treatment, it is determined that the material still meets the definition of a hazardous waste, this material must be disposed of at a properly licensed hazardous waste facility or else it must be re-treated to render it non-hazardous.

We also discussed your plans for attempting to modify the design of your manufacturing facility to qualify for the EPA totally enclosed treatment exemption. With regard to this issue, you are to provide us with an engineering plan which lays out the proposed modifications that you intend to make. We will discuss the plan with EPA as soon as it is received and advise you whether or not the changes you propose would qualify your plant for the totally enclosed exemption. Since this is an EPA exemption we have adopted by reference in our state regulations, the ultimate decision on this issue will rest with EPA, not us.

As we pointed out, however, this exemption only applies to the need for a permit. Even if the exemption is granted, it will still be necessary for you to make the treatment demonstration discussed previously to show that your system provides legitimate treatment.

During the meeting you also indicated that you are under a very tight time framework for resolving these issues. As such, we urge you to provide us with the engineering plan for the totally enclosed treatment system, the waste testing protocol and the subsequent test data as quickly as possible, as we cannot make any evaluations concerning treatment system acceptability or whether your proposed revisions will qualify you for the totally enclosed treatment exemption until we receive these items.

cc: D. Rector
K. Burda
C&E File

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

July 7, 1986

TO: Hazardous Waste Division Supervisors

FROM: Phil Roycraft

SUBJECT: On-Site Treatment

Attached is a memo outlining EPA's position on on-site treatment at a geenrator's facility. Basically, they have taken the position that treatment at the site of a generator which occurs in containers or tank does not need a permit, provided the waste is stored in accordance with the accumulation standards of 40 CFR 262.34. Although they first relea this interpretation in the March 24, 1986 small quantity generator rule the interpretation applies to all generators.

We have determined that the EPA interpretation does not apply under Act 64. EPA's position is based on the fact that they have no standards fo treatment facilities, and that the accumulation standards of 40 CFR 262.34 adequately regulate the storage of the material. We do have standards for treatment under Act 64. Therefore, generators in Michig still need an operating license for on-site treatment.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 17 1986

OFFICE OF
SOLID WASTE AND EMERGEN

MEMORANDUM

SUBJECT: On-site Treatment

FROM: Marcia Williams, Director
Office of Solid Waste

RECEIVED
JUN 25 1986
HAZARDOUS W

TO: Harry Seraydarian, Director
Toxics and Waste Management Division,
Region IX

The purpose of this memo is to respond to your April 9, 1986, request for clarification of a recent statement with respect to permitting of treatment activities occurring in a generator's accumulation tanks or containers.

As noted in your memo, the preamble to the final small quantity generator regulations promulgated on March 24, 1986, states that "... no permitting would be required if a gener... chooses to treat their hazardous waste in the generator's accumulation tanks or containers in conformance with the requirements of Section 262.34 and J or I of Part 265." This interpretation is applicable to all generators subject to Se... 262.34.

This statement is based upon a legal interpretation of ... the existing rules allow at this point in time rather than a deliberate and significant shift in Agency policy with respe... to accumulation or treatment. The preamble discussion conti... "Nothing in Section 262.34 precludes a generator from treati... waste when it is in an accumulation tank or container covere... that provision (emphasis added)." The interpretation is predicated on the fact that the Agency has allowed certain ... of storage to occur at generation sites (i.e., accumulation ... periods of 90, 180, or 270 days, depending on generator ty... without the requirement for permitting or interim status. S... the Agency has never developed standards specific to treatme... in tanks and containers, the same technical standards appli... to such storage (i.e., Subpart I or J of Part 265) would als... be applicable to treatment.

In choosing to communicate this legal interpretation in the small quantity generator final rule, OSW sought to avoid forcing small firms to stop conducting beneficial treatment of small quantities of hazardous waste in their accumulation tanks and containers by requiring them to either cease treatment or expend significant resources to obtain a RCRA permit. We do not believe that allowing some treatment to occur while wastes are being accumulated prior to subsequent management, in full compliance with applicable tank or container standards, is currently prohibited under the existing regulatory scheme.

With respect to the limits of treatment which may occur without a permit on-site, this legal interpretation only applies to treatment occurring in a generator's own accumulation tanks or containers subject to, and in compliance with, Section 262.34. This means that the tank or container in which treatment occurs must be appropriately marked with the date the accumulation period began, the tank or container must be completely emptied every 90 days (or 180/270 days for generators of 100-1000 kg/mo), and must be operated in strict compliance with Subparts I or J of Part 265. Any amendments to these Subparts which may be promulgated in the future would also apply. Treatment in other than tanks or containers (e.g., incineration, land treatment or treatment in surface impoundments) would continue to require a permit.

We would expect that generators that treat hazardous waste on-site in tanks or containers and who have obtained interim status, a full permit, or have a Part B application pending might wish to exit the permit process on the basis of this interpretation. Since such on-site treatment without a permit has never been legally precluded under RCRA, those who now wish to avail themselves of this interpretation may do so, provided they comply with all applicable rules respecting withdrawal of permit applications. If however, a unit that now qualifies for Section 262.34 has, in the past, been subject to regulation because it did not qualify for the Section 262.34 exemption, the Region should determine whether the unit has residual obligations under Part 264 or 265 (e.g., closure requirements). In addition, the fact that such a unit was once under interim status provides a basis for action under Section 3008(h), where appropriate.

However, we would caution these generators, as well as those who may wish to alter their accumulation practices in order to conduct treatment without a permit, not to rely upon the continued existence of this legal interpretation in making process changes requiring substantial capital outlays. Specifically, OSW is now considering publication

of an advanced notice of proposed rulemaking that would seek comment on a number of issues related to the 90/180/270 day accumulation provisions. Should the Agency decide at some time in the future to either modify the 90 day accumulation rule in some manner or to write specific standards for treatment, the obligations of generators with respect to treatment in accumulation tanks could change.

cc: Regional Division Directors
Eileen Claussen
Bruce Weddle
Jack Lehman

JUL 9 1986

5HE-12

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

David C. Van Dyke
Director of Safety and
Environmental Protection
Grede Foundries, Inc.
P.O. Box 26498
Milwaukee, Wisconsin 53226

Re: Amended Letter of Warning
Iron Mountain Foundry
Kingsford, Michigan
MID 006 131 890

Dear Mr. Van Dyke:

As discussed in your telephone conversation with Laura Lodisio of my staff on July 8, 1986, this is to amend my previous letter dated June 27, 1986.

In my earlier letter it is stated that all waste has been disposed of in an Act 641 Type III landfill in Kingsford, Michigan. Based on additional information from the Michigan Department of Natural Resources (MDNR), we have been informed that the landfill at which you are disposing of wastes is not licensed under Act 641. The landfill is, in fact, not licensed to operate by the State of Michigan.

This modification does not alter our concerns with hazardous waste disposal from your Iron Mountain Facility. The information we have requested in my June 27, 1986, letter must still be provided within the requested time period. Again, please contact Laura Lodisio at (312) 886-7090, if you have further questions.

Sincerely,

ORIGINAL SIGNED BY
WILLIAM E. MUNO

William E. Muno, Chief
RCRA Enforcement Section

cc: [illegible]

JUL 9 1986

5HE-12

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

David C. Van Dyke
Director of Safety and
Environmental Protection
Grede Foundries, Inc.
P.O. Box 26498
Milwaukee, Wisconsin 53226

Re: Amended Letter of Warning
Iron Mountain Foundry
Kingsford, Michigan
MID 006 131 890

Dear Mr. Van Dyke:

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This modification does not alter our concerns with hazardous waste disposal from your Iron Mountain Facility. The information we have requested in my June 27, 1986, letter must still be provided within the requested time period. Again, please contact Laura Lodisio at (312) 886-7090, if you have further questions.

Sincerely,

ORIGINAL SIGNED BY
WILLIAM E. MUNO

William E. Muno, Chief
RCRA Enforcement Section

cc: Delbert Rector, MDNR
Thomas Polasek, MDNR
James Roberts, MDNR

bcc: Rick Karl (5HE-12)
Diane Spencer (5HS-13)

5HE-12:LLODISIO:ssmith:6-7090:7/8/86

	TYPIST	AUTHOR	OTHER STAFF	UNIT CHIEF	SECT. SEC'Y	SECT. CHIEF	MINER CHIEF	MINES DIR
INIT. DATE	AP 7-8-86	7/8/86		RCK 7/8/86	AP 7-9-86	WEM 7-9-86		

FYI

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF:
5HE-12

JUN 27 1986

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. David C. Van Dyke
Director of Safety and
Environmental Protection
Grede Foundries, Inc.
P. O. Box 26499
Milwaukee, Wisconsin 53226

Re: Letter of Warning
Iron Mountain Foundry
Kingsford, Michigan
MID 006 131 890

Dear Mr. Van Dyke:

Your letter dated June 4, 1986, to Ms. Randi M. Kim of the United States Environmental Protection Agency (U.S. EPA) Region V, RCRA Permit Section has been recently brought to the attention of the RCRA Enforcement Section.

Upon our review of the E.P. toxicity data that was submitted with your letter, it was determined that a number of the batches of waste tested still exhibited the characteristics of E.P. Toxicity following treatment. Specifically, these batches were tested on the following dates:

08/25/81
08/25/81
06/21/83
07/21/83
04/03/84
04/01/85
08/07/85
09/04/85

According to the information in your letter, all of this waste has been disposed of in an Act 641 Type III landfill in Kingsford, Michigan. Under Federal and State laws, such a landfill is not permitted to accept hazardous waste. Though your data does indicate that the average of 61 waste shipments over a six year period shows levels below that of the E.P. Toxicity limits, the individual waste shipments listed above are considered to be hazardous waste, and are subject to all applicable requirements for disposal as such.

L. Lodisio 5HE-12

P 203 688 87[illegible]

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO
Mr. David C. Van Dyke

STREET AND NO.
P. O. Box 26499

P.O., STATE AND ZIP CODE
Milwaukee, Wis. 53226

POSTAGE		$ .22
CONSULT POSTMASTER FOR FEES — OPTIONAL SERVICES	CERTIFIED FEE	.75 ¢
	SPECIAL DELIVERY	¢
	RESTRICTED DELIVERY	¢
	RETURN RECEIPT SERVICE — SHOW TO WHOM AND DATE DELIVERED	¢
	RETURN RECEIPT SERVICE — SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
	RETURN RECEIPT SERVICE — SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	.70 ¢
	RETURN RECEIPT SERVICE — SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES		$ .67

POSTMARK OR DATE

MILWAUKEE, WISCONSIN STA. O
JUL 1986

L. Lodisio 5HE-12, EPA, 230 S. Dearborn St., Chgo. Ill.

PS Form 3800, Apr. 1976

PS Form 3811, July 1982

● **SENDER:** Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
   - ☐ Show to whom and date delivered ..... ____¢
   - ☒ Show to whom, date, and address of delivery .. ____¢
2. ☐ RESTRICTED DELIVERY..... ____¢
   (The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL $____

3. ARTICLE ADDRESSED TO:
Mr. David C. Van Dyke
P. O. Box 26499
Milwaukee, Wis. 53226

4. TYPE OF SERVICE:
- ☐ REGISTERED ☐ INSURED
- ☒ CERTIFIED ☐ COD
- ☐ EXPRESS MAIL

ARTICLE NUMBER
P 203 688 878

(Always obtain signature of addressee or agent)

I have received the article described above.

SIGNATURE ☒ Addressee ☐ Authorized agent
David C Van Dyke

5. DATE OF DELIVERY
7/7/86

POSTMARK (may be on reverse side)

6. ADDRESSEE'S ADDRESS *(Only if requested)*

7. UNABLE TO DELIVER BECAUSE:

7a. EMPLOYEE'S INITIALS

RETURN RECEIPT

☆ GPO: 1982-379-593

We require that you submit an explanation of your waste management practices detailing your procedures for handling and disposing of waste which is characterized as hazardous. Again, please be advised that any treated waste that exceeds the maximum concentration of any of the parameters in Table I, 40 CFR 261,24(b), is a hazardous waste and is subject to all applicable requirements of Subtitle C of RCRA. Failure to comply with all applicable requirements may subject you to further enforcement action by this Agency.

Your response must be submitted to this office within 15 days of receipt of this letter. If you have questions or concerns regarding this matter, please contact Ms. Laura Lodisio of my staff at (312) 886-7090.

Sincerely,

Wm. E. Muno

William E. Muno, Chief
RCRA Enforcement Section

cc: Thomas Polasek, MDNR
Delbert Rector, MDNR

GREDE FOUNDRIES, INC.

GENERAL OFFICES
P.O. BOX 26499
MILWAUKEE, WISCONSIN 53226-0499
TELEPHONE (414) 257-3600

GRAY IRON
IRON MOUNTAIN FOUNDRY-KINGSFORD, MICHIGAN
ROBERTS FOUNDRY CO., INC.-GREENWOOD, SOUTH CAROLINA
DUCTILE IRON
LIBERTY FOUNDRY-WAUWATOSA, WISCONSIN
REEDSBURG FOUNDRY-REEDSBURG, WISCONSIN
WICHITA FOUNDRY-WICHITA, KANSAS
STEEL
MILWAUKEE STEEL FOUNDRY-MILWAUKEE, WISCONSIN
SPECIAL SERVICES
SHORT RUN SPECIALTY FOUNDRY-MILWAUKEE, WISCONSIN
TOOLING CENTER-MILWAUKEE, WISCONSIN
MIDLAND METAL TREATING-FRANKLIN, WISCONSIN

June 26, 1986

Ms. Randi Kim
U.S. EPA
Region 5
230 South Dearborn Street
Chicago, IL 60604

Dear Ms. Kim:

RE: Totally Enclosed Treatment Of Cupola Emission Control Dust - Grede Foundries, Iron Mountain, Michigan

This letter follows my May 23, 1986, letter. Attached is the blueprint drawing of our planned treatment of instream waste at our cupola baghouse. On the blueprint are the system specifications and operating procedure.

The laboratory performance testing procedure as recommended by Michigan DNR at our June 24, 1986, meeting will be conducted by RMT Inc.

Please evaluate this design and report your approval and recommendations to this office.

Sincerely,

GREDE FOUNDRIES, INC.

David C Van Dyke

David C. Van Dyke
Director of Safety and
Environmental/Protection

DCVD:rm/TH/02

Enclosure

CONVERSATION RECORD

TIME: 8:45
DATE: 6/19/86

TYPE: ☐ VISIT ☐ CONFERENCE ☒ TELEPHONE (☒ INCOMING ☐ OUTGOING)

Location of Visit/Conference:

ROUTING	
NAME/SYMBOL	INT

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU: DAVID VAN DYKE

ORGANIZATION (Office, dept., bureau, etc.): Grede Foundries

TELEPHONE NO:

SUBJECT: Letter dated June 4 from VanDyke re: landfilling waste.

SUMMARY: I informed Mr. VanDyke that the treated waste is not a RCRA hazardous waste as long as the waste does not exceed the maximum concentration for EP toxicity for lead and cadmium. He asked that I write a letter to him confirming this issue.

I also told him that MDNR has more stringent regulations and that they do not approve treatment by dilution for characteristic wastes.

ACTION REQUIRED: Write letter re: above.

NAME OF PERSON DOCUMENTING CONVERSATION: RANDI KIM

SIGNATURE: [signature]

DATE: 6/19/86

ACTION TAKEN

SIGNATURE | TITLE | DATE

GREDE FOUNDRIES, INC.

GENERAL OFFICES
P.O. BOX 26499
MILWAUKEE, WISCONSIN 53226-0499
TELEPHONE (414) 257-3600

GRAY IRON
IRON MOUNTAIN FOUNDRY-KINGSFORD, MICHIGAN
ROBERTS FOUNDRY CO., INC.-GREENWOOD, SOUTH CAROLINA
DUCTILE IRON
LIBERTY FOUNDRY-WAUWATOSA, WISCONSIN
REEDSBURG FOUNDRY-REEDSBURG, WISCONSIN
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MILWAUKEE STEEL FOUNDRY-MILWAUKEE, WISCONSIN
SPECIAL SERVICES
SHORT RUN SPECIALTY FOUNDRY-MILWAUKEE, WISCONSIN
TOOLING CENTER-MILWAUKEE, WISCONSIN
MIDLAND METAL TREATING-FRANKLIN, WISCONSIN

June 4, 1986

Ms. Randi M. Kim
U. S. EPA
Region V
230 South Dearborn St.
Chicago, IL 60604

Re. Act 641 Permit - Grede Foundries, Inc., Kingsford, Michigan

Dear Ms. Kim:

On May 28, 1986, Grede Foundries discovered, indirectly, the substance of your decision to ban cupola baghouse dust from the waste stream of our type III landfill in Kingsford, Michigan. We have not yet received a statement of your position. I possess a copy of an interoffice memo from the Michigan DNR ordering the exclusion of the baghouse dust from the landfill until another decision is made concerning adequate treatment.

To my knowledge, this decision is based on the use of our currently landfilled waste material. This material, made up roughly of six parts waste sand to one part cupola baghouse dust, is the material that has been under scrutiny since 1980 and is the material that was used to gain approval of our Act 641 landfill. This foundry waste material has always tested out non-hazardous and has even been sought after as cover material in the municipal landfill. Now, after all these years of working our way through the regulatory permitting system, we hear the theory that we are diluting and not attenuating the "hazardous" components of our baghouse dust.

At our meeting of December 5, 1985, James T. Williams of our company explained the attenuating properties of the clay in our waste sand. Again, at our meeting of May 1, 1986, Mr. Williams explained these properties and produced a ledger sheet showing 61 successive sample tests taken on a regular basis from September, 1980, through April, 1986. This data, reproduced and attached, indicates a statistical average of 98.4 ppm lead and 7.15 ppm cadmium in our raw baghouse dust. Over this almost six year period we averaged a mixing level of 7.5 to 1 parts waste sand to baghouse dust. If the benefit of this mixing was dilution only, as you assert in your decision, the diluted lead level would be 13.12 ppm and cadmium level would be 0.95 ppm. The actual average is 1.92 ppm of lead, an attenuation level 583 percent greater than dilution. The actual average for cadmium is 0.63 ppm, an attenuation level of 51 percent greater than dilution. All samples were collected at the discharge chute of the cement truck as the waste material was being deposited into the landfill. It's quite obvious from these tests (all run by CBC-Aqua Search Environmental Laboratory, 140 East Ryan Road, Oak Creek, Wisconsin 53154-4599, (414) 764-7005, using 1982, EPA SW846 test methods for evaluating solid waste, physical/chemical methods, known as the EP Toxicity test) that the "hazardous" ingredients of the baghouse dust are attenuated and rendered non-hazardous by our current mixing method.

COPY

This fact was not the reason for our meetings on December 5 and May 1. The reason for those meetings was that you did not believe that our current mixing method-using a cement truck to mix bag house dust and waste sand into a non-hazardous homogenous waste product for landfilling-met the letter of the law for a "totally enclosed" treatment facility. You based this on the word "stationary" in the regulation, which obviously never contemplated ingenuity on behalf of the regulated community, and justified your interpretation on a puff of dust witnessed escaping from a temporarily damaged conveyor cover during material transfer.

As a result we have been compelled to experiment with reduction/oxidation, pH control, chemical precipitation, and absorption techniques to chemically fix the "hazardous" ingredients of our baghouse dust before it is mixed with the attenuating waste sand. In my letter of May 23, 1986, I stated Grede's position and our current activities involving the engineering study. Although we do not agree with your interpretation of "totally enclosed", we have proceeded on this project in a spirit of cooperation.

Now we find out through rumor and second hand sources that you have banned this material altogether until further determination can be made. I cannot overemphasize the urgency of your immediate determination to release the restriction on licensing the landfill. I sincerely hope that the information in and attached to this letter allows you to make that determination and motivates you to deal directly with this office when decisions are made concerning our current and future manufacturing operations. The decisions you make not only affect the activities of this office, but in a real way affect the livelihood and future of our 350 employees at our Iron Mountain plant. Grede Foundries realizes the importance of your duty to protect the environment and has committed itself to this common goal.

Sincerely,

GREDE FOUNDRIES, INC.

David C Van Dyke

David C. Van Dyke
Director of Safety and
Environmental Protection

DCVD:rm/T/31

Enclosures

CC: Mr. James Roberts - MDNR - Lansing, MI
Ms. Andrea G. Stewart - MDNR - Roscommon, MI
Mr. Leonard H. Switzer - MDNR - Marquette, MI
Mr. James Connors - State Representative - Lansing, MI
Mr. Joseph S. Mack - State Senator - Lansing, MI

I R O N M O U N T A I N

CUPOLA BAG HOUSE DUST

E. P. TOXICITY TEST RESULTS

DATE	RAW DUST - PPM		DATE	ATTENUATED WASTE - PPM		
	LEAD	CADMIUM		MIX RATIO	LEAD	CADMIUM
09/11/80	17.0	3.6	12/22/80	Sand 10-1	0.43	0.82
10/01/80	50.8	4.32	12/22/80	Sludge 8-1	1.52	0.26
12/07/80	82.4	8.1	12/22/80	CR DUST 8-1	<0.1	<0.01
07/23/81	7.2	4.1	08/25/81	2.17-1	11.5	1.5
08/27/81	45.4	4.05	08/25/81	4.14-1	27.0	2.9
04/20/83	88.0	6.4	08/27/81	15-1	0.9	0.18
09/14/83	23.0	5.7	04/20/83	8-1	<0.1	0.008
09/23/83	530.0	24.0	04/20/83	4.4-1	1.7	0.46
02/27/86	42.0	4.1	04/20/83	8.7-1	1.9	0.28
			05/11/83	6.3-1	0.73	0.36
TOTAL	885.8	64.37	05/11/83	11.8-1	1.4	0.47
	÷9	÷9	05/20/83	10.5-1	0.27	0.41
AVERAGE	98.4	7.15	06/14/83	4.4-1	0.7	3.5
			06/21/83	5.5-1	6.6	1.9
			07/05/83	4.9-1	2.3	0.76
			07/19/83	9-1	1.2	0.26
			07/21/83	5.7-1	5.5	0.87
			07/26/83	8-1	1.2	0.56
			08/02/83	8.6-1	2.0	0.7
			08/10/83	10.3-1	<0.1	0.016
			08/10/83	11.0-1	0.15	0.089

DATE	ATTENUATED WASTE - PPM		
	MIX RATIO	LEAD	CADMIUM
08/17/83	9.4-1	0.13	0.022
08/23/83	9.2-1	0.44	0.54
08/30/83	9.8-1	2.8	0.39
09/06/83	9.4-1	0.71	0.23
09/23/83	8-1	<0.1	0.24
10/04/83	7.6-1	1.4	0.266
11/02/83	8.5-1	<0.1	0.12
11/03/83	8.0-1	<0.1	0.013
12/06/83	9.5-1	0.63	0.18
01/06/84	8.2-1	0.2	0.19
03/05/84	6.3-1	1.2	0.17
04/03/84	5.0-1	0.18	4.0
04/25/84	6.5-1	0.11	0.39
04/25/84	6.2-1	1.1	0.47
05/07/84	6.4-1	3.5	0.6
06/05/84	6-1	0.28	0.911
07/10/84	8.4-1	0.5	0.14
08/06/84	6.3-1	0.7	0.767
09/05/84	8.1-1	1.6	0.41
10/03/84	6.1-1	0.61	0.41
11/06/84	6.2-1	0.73	0.2
12/10/84	7-1	0.27	0.35
01/04/85	8.3-1	1.8	0.29
02/05/85	7-1	0.2	0.76
03/08/85	7.5-1	0.48	0.25

DATE	ATTENUATED WASTE - PPM		
	MIX RATIO	LEAD	CADMIUM
04/01/85	6.3-1	0.23	1.3
05/20/85	6.1-1	<0.1	0.094
06/07/85	6.4-1	0.9	0.63
07/11/85	6.4-1	1.5	0.8
08/07/85	6.2-1	5.2	0.19
09/04/85	6.2-1	10.0	5.6
09/19/85	7.8-1	4.3	0.28
10/08/85	7.7-1	3.3	0.22
11/05/85	8.4-1	2.0	0.35
12/06/85	7.9-1	1.0	0.2
01/13/86	6.0-1	0.9	0.16
02/07/86	6.4-1	<0.1	0.013
03/08/85	6.4-1	<0.1	0.036
03/31/86	8-1	<0.1	0.11
04/07/86	8.2-1	0.1	0.086
TOTAL	457.71	117	38.691
	÷61	÷61	÷61
AVERAGE	7.5-1	1.92	0.63

RAW DUST

	LEAD	CADMIUM
AVERAGE	98.4	7.15
	÷7.5	÷7.5
Dilution Only (X)	13.12	0.95
Attenuated Actual (Y)	1.92	0.63

$\frac{(X) - (Y)}{(Y)}$ = % DIFFERENCE ATTENUATION VS. DILUTION

$\frac{X - Y}{Y}$		
	583%	51%

MICHIGAN EPARTMENT OF NATURAL SOURCES

INTEROFFICE COMMUNICATION

May 27, 1986

TO: Tom Polasek, HWD

FROM: Jim Roberts, HWD Jim Roberts

SUBJECT: Grede Foundries

Recently I have been getting some inquiries from GWD on Grede Foundries and their regulatory status with the Hazardous Waste Division. On October 24, 1985, I sent a letter to the company requesting information on the testing, sampling and attenuation of their hazardous waste. The information requested was to be provided at a meeting held November 14, 1985, at the facility. The material submitted was not adequate to make any determinations on their current operations. Another meeting was held on May 1, 1986, in Chicago, in which the information was requested again.

The company is trying to design a treatment system that would qualify for a totally enclosed exemption. We have talked about some conceptual ideas but the company has not submitted any designs as of this date. The Division has recommended that the facility's Part B called in.

As I see it, the company must submit technical documentation to verify that their hazardous waste is actually being attenuated and not simply treated by dilution. If the company does not submit a satisfactory demonstration, their current and past disposal practices would constitute a violation of Act 64. Also, if the company does not submit a design that meets the criteria for a totally enclosed system then the company's facilities must be permitted.

Our section feels that getting companies to submit things, permit applications and treatment verifications included, is a compliance activity. Once received, we will do the technical review and keep you informed of our progress. If you disagree with this philosophy, give Al a call, as he is the originator of this paragraph.

cc: Mr. Al Howard, HWD
Mr. John Bohunsky, HWD
Mr. Ken Burda/C&E File
Mr. Tom Work, GQD
Mr. Hank Switzer, GQD
Ms. Randi Kim, US EPA - Region 5

xc:

RMT INC.

RMT, Inc.
Suite 124
1406 East Washington Ave.
Madison, WI 53703
Phone: 608-255-2134

RECEIVED
MAY 03 1986
SAGINAW DISTRICT
H. W. SWQD GWQD LAW, AIR

April 4, 1986

Ms. Marsha Williams, Director
Office of Solid Waste Management (WH-562)
U.S. Environmental Protection Agency
401 M. Street S.W.
Washington, D.C. 20460

Dear Ms. Williams:

The purpose of this letter is to request clarification of the USEPA's policy requiring generators who accumulate wastes in tanks and containers (in conformance with the requirements of 40 CFR Part 262.34 and Subparts J or I of Part 265) and subsequently treat the waste in the container or tank to obtain a facility operating permit from the Agency to conduct this treatment activity.

In the past, we have advised our clients, who are generators (as defined by 40 CFR Part 262) accumulating wastes in tanks and subsequently treating this waste, that they are required to obtain a facility operating permit from the USEPA to conduct the treatment activity. Our recommendation was based on interpretation we received from both regional and headquarters EPA personnel indicating that treatment of hazardous waste (with the exception of eliminating neutralization) in generator's accumulation tanks or containers required an operating permit.

Recently (March 24, 1986), the USEPA published final rules applicable to generators of between 100-1,000 kilograms of hazardous waste per month. The preamble to these final rules stated that "...no permitting would be required if a generator chooses to treat their hazardous waste in the generator's accumulation tanks or containers in conformance with [40 CFR Part] 262.34 and Subparts J or I of Part 265. Nothing in [40 CFR Part] 262.34 precludes a generator from treating wastes when it is in an accumulation tank or container covered by that provision." Although this statement appeared in the small quantity generators final rules it appears to apply to all generators.

This statement seems to conflict with interpretations we have received to date from the Agency regarding this issue. We are presenting our request for clarification of this issue in two parts. First, we are requesting clarification of certain terms used in the March 24 Federal Regulation preamble discussion. Second, we will present descriptions of four examples of activities currently being conducted by our clients which in the past have been viewed by the Agency as requiring an operating permit, but which now appear to not require such an operating permit. We request that the Agency review these process descriptions and provide a determination of their permit status.

188.19 937:KARb:usepal

TO: Randi Kim
US EPA - Region _

FROM: Jim Roberts
MDNR

SUBJECT:

OUR JOB NO.

DATE OF MEMO 6/6/86

MESSAGE

Here is the info that RMT sent in to EPA headquarters. This could have a major impact on the RCRA program.

SENDER — DO NOT WRITE BELOW THIS LINE

SIGNED Jim

REPLY

RECEIVED
JUN 12 1986
SWB - AIS
U.S. EPA, REGION V

RECEIVED
JUN 11 1986
SOLID WASTE BRANCH
U.S. EPA, REGION V

SIGNED

DATE

ORIGINAL

SENDER — Retain part 2 for your follow-up, send parts 1 and 3 to addressee
RECIPIENT — Retain part 1 and return part 3

Request for Clarification of Specific Definitions:

1. Please provide a clarification of the term "accumulation" as it applies to generators of hazardous waste.

   - Does the Agency distinguish between accumulation of waste for handling other than treatment and, accumulation for the sole purpose of on-site treatment?

   - If the Agency does distinguish between, accumulation for purposes of treatment and accumulation for other handling methods, what criteria will the Agency use to determine when a waste is being accumulated for the purpose of treatment and when is a waste being accumulated for the purpose of some other handling method?

2. Please provide a clarification of the term "treatment."

   - Is a generator allowed to conduct all treatment activities listed in the definition of treatment provided in 40 CFR Part 260.10 without a permit, or are there certain treatment activities conducted by generators in their accumulation tanks or containers which require a permit?

   - If the USEPA distinguishes between certain treatment activities conducted by generators and consequently will require permitting of these activities, what are the criteria the USEPA will use to distinguish between a treatment requiring a permit and one which does not?

Process Descriptions

- Accumulation of Wastes in Containers and Treatment Prior to Disposal

  Generator A accumulates both listed and characteristics hazardous wastes in containers in conformance with Part 265, Subpart I requirements. Prior to shipment of these containers to an off-site disposal facility, the generator adds certain treatment reagents to the containers resulting in solidification of the waste.

  Is the generator required to obtain an operating permit from USEPA to conduct this treatment activity?

RMT INC

X . Treatment of a Reactive Waste in an Accumulation Tank

Generator B generates 30 tons/d of a waste that meets the definition of reactivity due to the generation of acetylene gas when exposed to water. The waste is treated on-site in a two-stage process to render it nonhazardous. Stage one involves cooling the waste in 2-cubic yard accumulation containers in an accumulation area. The containers are in conformance with 265 subpart I requirements.

After approximately one day of cooling the containers are moved, and their contents transferred to a 24,000 gallon tank meeting 265 subpart J requirement. The waste is flooded with water in the tank. After several hours of contact the water is drawn off, and the nonhazardous waste is removed for disposal. Total residence time for the waste is no more than 2 days from the time it is placed in the accumulation containers to the time it is removed from the treatment, accumulation tank.

1. Is a permit required to conduct this activity?

2. Would a permit be required if the generator were to conduct the treatment in the accumulation container after the waste had cooled.

. Treatment of Wastewater Treatment Sludge in Accumulation Tanks

Generator C operates an on-site, wastewater treatment plant for the treatment of process wastewaters. The plant generates a sludge which is EP Toxic for lead and cadmium. Dewatered sludge is collected in containers at the point it falls off a belt filter press. The containers are emptied into a circular tank where the sludge is treated with magnesium hydroxide to reduce the leachability of lead and cadmium to nonhazardous levels. The nonhazardous sludge is removed from the tank for disposal. Total residence time of the sludge is not more than 5 days from the time it falls off the filter press into the accumulation containers to the time it is removed from the treatment accumulation tank.

Would treatment in the accumulation tank require a permit?

. Treatment of EP Toxic Dust in Accumulation Tanks

Generator D generates a baghouse dust which is EP Toxic for lead and cadmium. The dust is accumulated in individual containers and transported to a central accumulation tank for treatment purposes. A dry treatment chemical is introduced into the tank and mixed with the dust rendering it nonhazardous. The treated dust is removed from the tank within one week for disposal.

Does treatment in this accumulation tank require a permit?

We are currently assisting clients who operate process described above, in responding to Notices of Deficiences issued by USEPA for incomplete permit applications submitted by our clients for these processes. Some of these NODs require substantial supplementation and the requested information must be submitted within a very short period of time. We are currently considering recommending to these clients that they notify USEPA of their contention that these processes do not require permits and that they are withdrawing their permit application. We, therefore, request USEPA respond in an expeditious manner to our request for clarification of this issue.

I can be reached at (608) 255-2134.

Thank you for your attention to this matter.

Very truly yours,

Kevin A. Lehner
Environmental Scientist

kar

cc: Office of General Council
Mr. Robert Axelrad

188.19 937:KARb:usepa1

managed, the Agency has decided to impose manifest requirements on these generators, except in the case of certain reclamation agreements. The existence of a State-approved collection center does not, on its own, provide assurance that the waste would be transported or handled properly prior to or during transportation to such a facility, or indeed, that the shipment would ever reach such a facility. Consequently, development of some recordkeeping and transportation requirements would be needed which would offset any potential savings of such an exemption.

E. Part 264/265 Facility Standard Issues

The requirements for facilities that treat, store, or dispose of hazardous waste are contained in Parts 264 and 265 of the hazardous waste regulations. The Part 265 standards are applicable to facilities under interim status, a condition which allows a facility to continue operating until it receives a full RCRA permit. (See HSWA section 3005(e)). The Part 264 standards establish the minimum standards to be incorporated into a full RCRA permit by EPA or a State with an EPA authorized hazardous waste program.

Section 261.5(b) previously exempted generators of 100–1000 kg/mo of hazardous waste from the facility requirements of Parts 264 and 265 that cover the on-site treatment, storage, or disposal of hazardous waste, provided the facility is at least approved by a State to manage municipal or industrial (non-hazardous) solid waste and no more than 1000 kg of hazardous waste were accumulated at any time. Under the rules promulgated today, this exemption will continue to apply only to generators of less than 100 kg/mo of hazardous waste. Generators of 100–1000 kg/mo of hazardous waste will be subject to full regulation under Parts 264 and 265 if they accumulate hazardous waste on-site for greater than 180 (or 270) days, exceed the 6000 kg accumulation limit, engage in waste treatment in other than tanks, or manage their waste in surface impoundments, waste piles, landfills, or land treatment facilities. In addition, those State-approved municipal or industrial waste facilities that manage wastes only from generators of 100–1000 kg/mo will also no longer be exempted from the Part 264 and 265 permit requirements. In the proposed rule, the Agency requested comments concerning the application of the uniform Part 264 and 265 requirements to generators of 100–1000 kg/mo and to the treatment, storage, and disposal facilities that accept waste from the generators.

1. Activities Requiring Permits

Under today's final rules, 100–1000 kg/mo generators will be required to obtain a permit if they treat or dispose of hazardous waste on-site (except for treatment in tanks or containers during the 180/270 day accumulation period in conformance with Subparts J or L of Part 265, respectively) or accumulate hazardous waste on-site in tanks or containers for more than 180 (or 270) days.

A number of commenters agreed with the need to manage wastes from generators of 100–1000 kg/mo at fully permitted facilities. They argued that no special exemptions or requirements should be applied to the management of waste from these generators because the characteristics of the waste, not the source of the waste, poses the threat to human health and the environment.

Two commenters opposed the requirement for generators of 100–1000 kg/mo who accumulate waste on-site for longer than 180 (or 270) days to obtain RCRA permit, and argued that the accumulation time limit before permitting is required should be extended. One of the commenters also maintained that determining the maximum quantity of hazardous waste that may be accumulated at a non-permitted facility should be based on the degree of hazard posed by the waste and the generator's capacity to transport the waste off-site. The EPA disagrees with both of these positions. As noted in Unit III.C.4.a. of today's preamble, the HSWA of 1984 clearly limit Agency discretion in this matter. The Agency carries a heavy burden in extending the time limits established under section 3001(d)(6), and except for emergency circumstances, the Agency does not believe there to be sufficient justification for extending the limits Congress has established.

Another commenter opposed any permitting requirement due to the economic burden that would be placed on a small number of generators. While some generators of 100–1000 kg/mo may be burdened financially by the requirements promulgated today, Congress has already judged that outside of the accumulation limits allowed for in Section 3001(d)(6), disposal of wastes from these generators at permitted facilities is necessary to protect human health and the environment. In addition, since the rules allow generators to manage their hazardous wastes off-site, they are able to avoid the cost of acquiring a RCRA permit, if they so choose.

Several commenters suggested exemptions from the RCRA permitting requirements or reduced permit requirements for on-site waste treatment. Some commenters stated that there is a need to encourage on-site treatment to reduce the amount of wastes sent off-site and that the permitting requirements may hamper the ability of generators to treat wastes at their facilities.

The Agency disagrees that on-site treatment should be encouraged by exempting those generators of 100–1000 kg/mo from the RCRA permitting requirements. To the extent that these generators are conducting the same treatment/storage or treatment/disposal as other permitted facilities, their on-site treatment activities pose a potential risk to human health and the environment. Therefore, reduced or eliminated permitting requirements would be inappropriate.

Of course, no permitting would be required if a generator chooses to treat their hazardous waste in the generator's accumulation tanks or containers in conformance with the requirements of § 262.34 and Subparts J or L of Part 265. Nothing in § 262.34 precludes a generator from treating waste when it is in an accumulation tank or container covered by that provision. Under the existing Subtitle C system, EPA has established standards for tanks and containers which apply to both the storage and treatment of hazardous waste. These requirements are designed to ensure that the integrity of the tank or container is not breached. Thus, the same standards apply to a tank or a container, regardless of whether treatment or storage is occurring. Since the same standards apply to treatment in tanks as applies to storage in tanks, and since EPA allows for limited on-site storage without the need for a permit or interim status (90 days for over 1000 kg/mo generators and 180/270 days for 100–1000 kg/mo generators), the Agency believes that treatment in accumulation tanks or containers is permissible under the existing rules, provided the tanks or containers are operated strictly in compliance with all applicable standards. Therefore, generators of 100–1000 kg/mo are not required to obtain interim status and a RCRA permit if the only on-site management which they perform is treatment in an accumulation tank or container that is exempt from permitting during periods of accumulation (180 or 270 days).

Two commenters suggested that a mechanism should be created to tailor RCRA permits to the circumstances of individual facilities. For example, one commenter specifically asked for a simplified and streamlined permit for the incineration of spent paint spray

xc: Del Ken
Al Chuck
John/Dist. Joan

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 11 1986

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

OSWER Directive # 9432.00-1

MEMORANDUM

SUBJECT: Totally Enclosed Treatment

FROM: Marcia Williams, Director
Office of Solid Waste (WH-562)

TO: David Stringham, Chief
Solid Waste Branch, Region V
5HS-JCK-13

This is the regulatory clarification you requested on December 30, 1985 for the application of the totally enclosed treatment facility exemption to a tank treating emission control dusts at a scrap metal recycler. The system you describe is not totally enclosed because of the reasons given below.

Your description of the Grede foundry indicates that it heats scrap in a cupola. Emissions from the cupola rise into a hood which is connected to a baghouse via ducts. Ms. Randi Kim of your staff pointed out that hazardous waste is not generated prior to the baghouse unit, and the hood is not directly connected to the cupola. The emission control sludge captured in the baghouse is EP toxic for lead, and possibly chromium, according to Jim Roberts of the Michigan Department of Natural Resources. Grede Foundries proposes to directly connect a mixing tank to the baghouse by pipeline where the dust will be rendered nonhazardous by mixing with nonhazardous foundry waste sands and dusts containing bentonite clay. Since the mixing tank does not exist, we cannot determine whether the tank can technically prevent release of hazardous waste into the environment during treatment through use of traps, recycle lines, etc. Therefore, the central issue you raise is whether the mixing tank can be considered directly nnected to the industrial production process, satisfying one ndition of a totally enclosed treatment facility as defined in §260.10.

The definition in §260.10 of totally enclosed treatment facilities specifies that the treatment must be directly connected to an industrial production process. In your foundry example,

the cupola is part of the industrial production process, since it produces reusable metal; and the baghouse is part of the waste treatment process, since the sludge is not associated with product or raw materials, i.e., the sludge is disposed of, not recovered for further recycling. Therefore, the treatment that occurs downstream of the baghouse cannot qualify for a totally enclosed treatment exemption, since the cupola is open to the air before the hood collects the dust.

Although our preliminary information indicates that adsorption to clay can be an acceptable treatment method, you should pursue the question of whether the specific clay adsorption process proposed for this facility will provide the effective treatment that would allow it to be permitted as a treatment facility. Carlton Wiles, ORD/Cincinnati, FTS 684-7871, may be able to provide you with further guidance on clay adsoption treatment standards that should be incorporated into the treatment permit to assure effective treatment.

With alternate management practices, the emission control sludge would not be defined as a solid waste, and, therefore, would not be a RCRA hazardous waste. If the fines were returned to the cupola for metal recovery, the entire process would be viewed as closed loop recycling, and the baghouse sludge would not be considered to be a solid waste according to §261.2(e)(1)(iii). If the sludge were reclaimed elsewhere, it also would not be considered to be a solid waste, according to §261.2(c)(3). Sludges being reclaimed are not considered to be solid waste unless specifically listed by EPA, and this particular sludge is not so listed.

Alternatively, the system could be engineered differently. By connecting the hood directly to the cupola, the system could then meet the criteria for being directly connected to an industrial production process. The system may then qualify as a totally enclosed treatment system if the treatment met the technical standards for being closed to the environment.

Since mixing the baghouse dust with bentonite clay as described would require a RCRA permit for treatment, Grede Foundries may wish to pursue one of these other approaches that are not regulated under RCRA. According to data from the 1981 mail survey, many waste streams of K061 and K069 sludge are recycled both on and off site, so Grede may find that recycling is a cost effective management strategy. If you have any questions about this matter, you can contact Irene Horner of my staff at FTS 382-2550.

cc: Solid Waste Branch Chiefs
Regions I-IV and VI-X
Jim Roberts, Michigan DNR

ITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 11 1986

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

OSWER Directive # 9432.00-1

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Office of Solid Waste (WH-562)

TO: David Stringham, Chief
Solid Waste Branch, Region V
5HS-JCK-13

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cc: Solid Waste Branch Chiefs
Regions I-IV and VI-X
Jim Roberts, Michigan DNR

RMT, Inc.
Suite 124
1406 East Washington Ave.
Madison, WI 53703-3009
Phone: 608-255-2134

November 10, 1986

Control
Jack L - OGC
Mark Greenwood
cc David

Ms. Marcia Williams, Director
Office of Solid Waste
USEPA
Washington, DC 20460

Dear Ms. Williams:

This letter is to request clarification and guidance from your office on the application of totally enclosed treatment (TET) to cupola emission-control baghouses used in the foundry industry.

Baghouse technology is used by many foundries to control particulate emissions from the metal-melting process carried out in cupolas. The dust collected in the baghouse is often classified as hazardous by virtue of EP Toxicity. When removed from the baghouse, the dust is typically treated on-site (subject to RCRA permitting), or disposed as a hazardous waste at a permitted disposal facility.

For foundries, the alternative to a dry collection system as described above, is a wet "scrubber" system. This process also typically generates a hazardous waste, a wet sludge which is somewhat more difficult to handle. As with a baghouse dust, the sludge can be treated via a permitted on-site process or disposed at a permitted facility.

We believe that, in some cases, the treatment of hazardous baghouse dust can meet the definition of totally enclosed treatment in 40 CFR 260.10 and thus be exempt from RCRA permitting. This requires that the treatment facility is

1. directly connected to an industrial production process; and

2. constructed and operated in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment during treatment.

In a July 27, 1981 letter to Travenol Laboratories, Inc. (copy attached), USEPA provided guidance on the interpretation of the definition of TET. This included the following:

1. The totally enclosed facility must be "completely contained on all sides and pose little or no potential for escape of waste to the environment."

2. The facility must be constructed so that there is no predictable potential for overflows, spills or gaseous emissions.

RECEIVED 11/14 pst

386.01 937:TFR:wi111029

3. As long as one end of a treatment train is integrally connected to a production process, and each unit operation is integrally connected to the other, all qualify for the exemption if they meet the requirement of being "totally enclosed."

The USEPA has also provided an interpretation of TET requirements for a specific cupola/baghouse configuration at Grede Foundries (letter attached). In this case, the USEPA found that the foundry's treatment system would not qualify as totally enclosed because

1. the baghouse was not part of the industrial production process;

2. the cupola was open to the air; and

3. since the cupola was open to the air, downstream treatment units could not be totally enclosed.

Although we are not familiar with the specific design upon which this determination was made, we believe it does not accurately reflect the true nature of many cupola/baghouse systems. We offer the following discussion to put the above concerns in more perspective.

1. The Cupola/Baghouse Is A Production Process

Figure 1 is a schematic drawing for a typical cupola/baghouse configuration. In many designs, emissions from the cupola furnace are diverted through a closed system of ducts directly to a baghouse collection device. Since in this design the cupola cannot be operated without the baghouse, we believe the system constitutes a single production process.

The by-products of this production process are filtered gas and a hazardous dust. Under RCRA, the point of hazardous waste generation is typically the bottom of the baghouse hoppers where dust is removed into containers and/or treatment equipment. Air emissions may also be regulated under the Clean Air Act. Thus, we believe that the application of TET to this production process should be at the point where RCRA regulation would otherwise commence, i.e., at the bottom of the baghouse.

2. Fugitive Losses From The Production Process (i.e., The Cupola/Baghouse) Are Not Relevant To The Application of TET

In many integrated cupola/baghouse systems, the largest and only significant opening to the atmosphere is the charge door to the cupola. Since the charge door is clearly a part of the production process, we do not believe it is relevant to the application of downstream TET. Further

this part of the cupola, along with downstream ductwork and other devices up to the exhaust fan, are under negative pressure. Any leaks in the system would be mainly inward to the system as opposed to outward to the atmosphere. (During periods of process upset, such as loss of negative pressure, air flow to the cupola is typically cutoff.)

The requirements for TET specify that the treatment process must be totally enclosed, not the production process. Take, for example, the classic example of acid neutralization in a pipe. TET would be applied to the pipe and any other downstream equipment or facilities used for treatment. TET would not be applied to the open plating tank, say, where the acidic waste was first generated.

Many other analogous examples come to mind. Should the criteria for TET be applied to spray degreasing tanks where spent, hazardous solvents are generated? Are the fugitive emissions from a lead-based paint booth which generates EP-Toxic filters to be regulated as hazardous?

In its correspondence with Grede Foundries, the USEPA determined that since the cupola is open to the atmosphere before the baghouse, downstream treatment could not be totally enclosed. We believe that in most cases the ductwork between the cupola and baghouse is not open to the atmosphere. Thus, even though losses during production should not be relevant to TET, the cupola/baghouse (with the exception of the charge door) is substantially enclosed.

3. The Appurtenances To A Baghouse Which Are Used For Treatment Should Be Totally Enclosed

40 CFR 260.10 stipulates that equipment used for TET must prevent the release of hazardous waste to the environment during treatment. The configuration of Figure 1 illustrates that treatment does not take place within the baghouse itself (or the cupola, for that matter). It is possible, however, to construct pipelines, feed silos, and mixers directly to the bottom hopper of the baghouse in such a way as to prevent emissions during the conveyance and treatment of the hazardous dust. We believe this to be a reasonable and appropriate application of TET.

We would like to point out that it is also possible to add a treatment reagent, in a totally enclosed manner, to the cupola/baghouse at some point in the ductwork between the cupola and the baghouse. Under such a configuration, we would then consider the baghouse to be part of the treatment process and therefore subject to the criteria for TET. In fact, we believe that in many cases the TET criteria would be met.

In summary, we believe that totally enclosed treatment for cupola/baghouses, when carefully designed, is fully consistent with RCRA and with good environmental practice. We request input from the Agency on this issue so that we may continue to provide acceptable technical recommendations to clients seeking ways to treat their hazardous waste.

Please call if you have questions.

Sincerely,

J. M. Sued Jr.

Frederick M. Sued, Jr., P.E.
Environmental Process Engineering Department

tfr

Enclosures

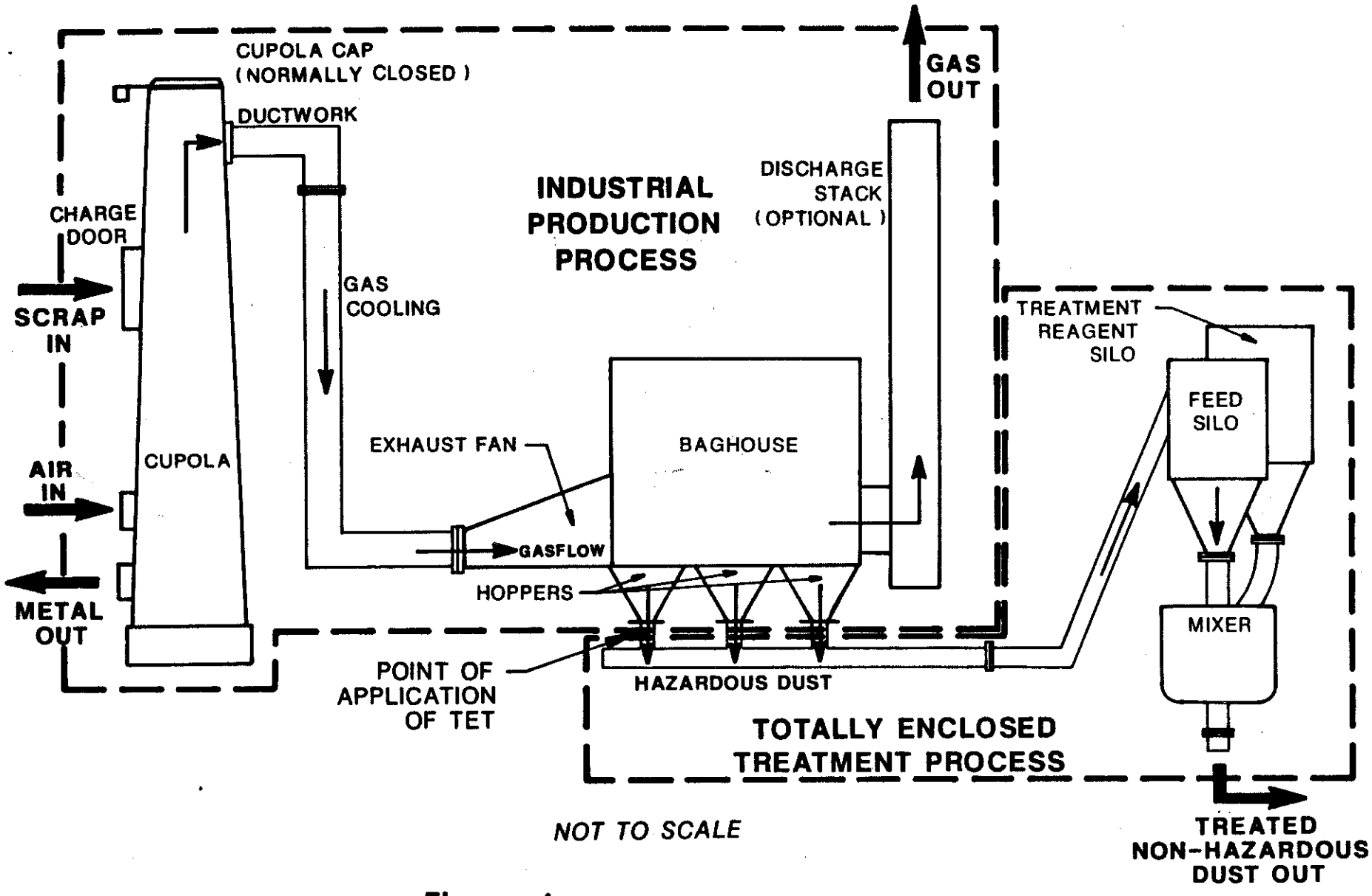


Figure 1

TYPICAL CUPOLA / BAGHOUSE CONFIGURATION WITH ASSOCIATED TREATMENT FACILITIES

RMT INC

Dwn. by	PPD
Date	10 / 86
Proj.#	386.01

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 11 1986

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

OSWER Directive # 9432.00-1

MEMORANDUM

SUBJECT: Totally Enclosed Treatment

FROM: Marcia Williams, Director
Office of Solid Waste (WH-562)

TO: David Stringham, Chief
Solid Waste Branch, Region V
5HS-JCK-13

This is the regulatory clarification you requested on December 30, 1985 for the application of the totally enclosed treatment facility exemption to a tank treating emission control dusts at a scrap metal recycler. The system you describe is not totally enclosed because of the reasons given below.

Your description of the Grede foundry indicates that it heats scrap in a cupola. Emissions from the cupola rise into a hood which is connected to a baghouse via ducts. Ms. Randi Kim of your staff pointed out that hazardous waste is not generated prior to the baghouse unit, and the hood is not directly connected to the cupola. The emission control sludge captured in the baghouse is EP toxic for lead, and possibly chromium, according to Jim Roberts of the Michigan Department of Natural Resources. Grede Foundries proposes to directly connect a mixing tank to the baghouse by pipeline where the dust will be rendered nonhazardous by mixing with nonhazardous foundry waste sands and dusts containing bentonite clay. Since the mixing tank does not exist, we cannot determine whether the tank can technically prevent release of hazardous waste into the environment during treatment through use of traps, recycle lines, etc. Therefore, the central issue you raise is whether the mixing tank can be considered directly connected to the industrial production process, satisfying one condition of a totally enclosed treatment facility as defined in §260.10.

The definition in §260.10 of totally enclosed treatment facilities specifies that the treatment must be directly connected to an industrial production process. In your foundry example,

the cupola is part of the industrial production process, since it produces reusable metal; and the baghouse is part of the waste treatment process, since the sludge is not associated with product or raw materials, i.e., the sludge is disposed of, not recovered for further recycling. Therefore, the treatment that occurs downstream of the baghouse cannot qualify for a totally enclosed treatment exemption, since the cupola is open to the air before the hood collects the dust.

Although our preliminary information indicates that adsorption to clay can be an acceptable treatment method, you should pursue the question of whether the specific clay adsorption process proposed for this facility will provide the effective treatment that would allow it to be permitted as a treatment facility. Carlton Wiles, ORD/Cincinnati, FTS 684-7871, may be able to provide you with further guidance on clay adsoption treatment standards that should be incorporated into the treatment permit to assure effective treatment.

With alternate management practices, the emission control sludge would not be defined as a solid waste, and, therefore, would not be a RCRA hazardous waste. If the fines were returned to the cupola for metal recovery, the entire process would be viewed as closed loop recycling, and the baghouse sludge would not be considered to be a solid waste according to §261.2(e)(1)(iii). If the sludge were reclaimed elsewhere, it also would not be considered to be a solid waste, according to §261.2(c)(3). Sludges being reclaimed are not considered to be solid waste unless specifically listed by EPA, and this particular sludge is not so listed.

Alternatively, the system could be engineered differently. By connecting the hood directly to the cupola, the system could then meet the criteria for being directly connected to an industrial production process. The system may then qualify as a totally enclosed treatment system if the treatment met the technical standards for being closed to the environment.

Since mixing the baghouse dust with bentonite clay as described would require a RCRA permit for treatment, Grede Foundries may wish to pursue one of these other approaches that are not regulated under RCRA. According to data from the 1981 mail survey, many waste streams of K061 and K069 sludge are recycled both on and off site, so Grede may find that recycling is a cost effective management strategy. If you have any questions about this matter, you can contact Irene Horner of my staff at FTS 382-2550.

cc: Solid Waste Branch Chiefs
Regions I-IV and VI-X
Jim Roberts, Michigan DNR

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: ~~DEC 24 1985~~ DEC 30 1985

SUBJECT: Totally Enclosed Treatment

FROM: David A. Stringham, Chief
Solid Waste Branch, Region V
5HS-JCK-13

TO: Marcia Williams, Director
Office of Solid Waste
WH-562

We would like to request regulatory clarification, concerning "totally enclosed treatment facilities", for a specific industry. We have included a brief description of the facility which has applied for this exemption. Since several other similar facilities have also expressed that they would like to consider this approach, we feel a standard decision is necessary.

We have received the document entitled "Totally Enclosed Treatment Facility" distributed by Alfred Lindsey of the Hazardous & Industrial Waste Division, but we would like you to review this proposal as we consider it a special case.

If additional information is necessary, please contact Ms. Randi Kim of my staff at (312) 886-6151. We would appreciate a response by January 20, 1986. Thank you for your assistance.

Attachment

5HS-13:SWB:TPS:MI:R.KIM:J:DAVIS:DRAFT 12/09/85:FINAL12/11/85:DISK 9

	TYP.	AUTH.	IL. CHIEF	WI. CHIEF	MI. CHIEF	MN/WI CHIEF	OH. CHIEF	TPS CHIEF	WMB CHIEF	WMD DIR
INIT. DATE	12-11-85	12-11-85			12-18-85			12/23/85	12/26/85	

12/24/85

~~DEC 24 1985~~

DEC 30 1985

ATTACHMENT

Grede Foundries recycles scrap metal for reuse in their production process. The cupola emissions generated rise into a hood which is situated over the cupola, and are transported to a baghouse via a duct. The emission control dust collected in the baghouse is a hazardous waste since it exhibits the characteristic of EP toxicity for lead.

Grede Foundries has proposed to install a mixing tank which will be directly connected to the baghouse by pipeline. In the tank, the emission control dust will be mixed with non-hazardous foundry waste sands and dusts containing bentonite clay which has the potential to attenuate toxic metals. The non-hazardous materials will be transported to the tank via pipeline or conveyor and possibly through a "trap door" so that there are no routes for a release from the tank. The resulting mixture is a non-hazardous waste which is shipped to a landfill.

The baghouse is a waste management unit which is not directly connected to the cupola. If the system is viewed in this manner it would not be classified as a totally enclosed system.

On the other hand, since the baghouse is not a RCRA regulated unit, it may be considered a part of the production process. Hazardous waste is not generated prior to the baghouse unit. Furthermore, the mixing tank will be directly connected to the baghouse so that it may qualify as a totally enclosed system.

Since the cupola is indoors and there are minimal routes for exposure to the environment, we recommend that this facility receive the exemption.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 12/6/85

SUBJECT: GREDE FOUNDRIES SITE VISIT (12/5/85)

FROM: RANDI KIM, TPS

TO: FILE

ATTENDANCE: JAMES WILLIAMS (GREDE), DAVID VAN DYKE (GREDE), JIM ROBERTS (MDNR), ANDREA STEWART (MDNR), R. KIM (U.S. EPA)

THE PURPOSE OF THE VISIT WAS TO BECOME FAMILIAR WITH THE TREATMENT OPERATION AND TO DISCUSS ANY MODIFICATIONS THE COMPANY WOULD HAVE TO MAKE TO THE UNITS TO MEET THE EXEMPTION FOR A TOTALLY ENCLOSED SYSTEM.

WE WITNESSED THE MIXING OPERATION AND IS AS FOLLOWS: THE MIXING TRUCK RECEIVES WATER AT THE FIRST STATION AND THEN DRIVES TO THE BAG-HOUSE TO ADD THE CUPOLA DUST (HAZ. WASTE). THEN HE DRIVES TO TWO MORE STATIONS WHERE HE ADDS A CLAY/SAND MIXTURE AT EACH. HE RETURNS TO THE WATER STATION TO ADD MORE WATER SO THAT IT IS MOIST ENOUGH FOR MIXING.

WE NOTICED THAT THE SCREW CONVEYOR WHICH CONNECTS THE BAGHOUSE TO THE MIXING TRUCK WAS NOT IMPERMEABLE TO DUST. IT WAS RELEASING DUST TO THE AIR DURING THE OPERATION.

PRODUCTION CONSISTS OF MELTING SCRAP METAL FOR REUSE. THE SCRAP CONTAINS LEAD. EMISSIONS FROM PRODUCTION ARE SENT THROUGH A HOOD AND DUCTS TO THE BAGHOUSE. (SEE SKETCH)

EPA FORM 1320-6 (REV. 3-76)

CONT'D

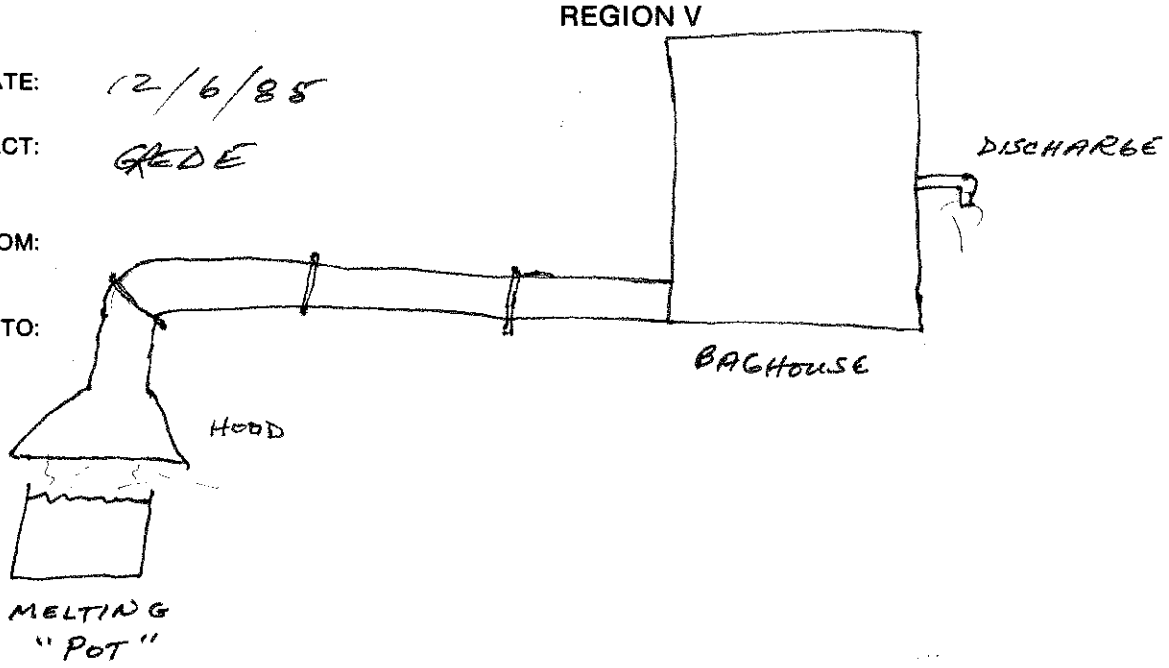
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 12/6/85

SUBJECT: GREDE

FROM:

TO:



WE DISCUSSED WHETHER THE MIXING WAS PURELY CHEMICAL FIXATION OR DILUTION. WE REQUESTED PROOF OF ATTENUATION: LAB DATA FOR EP TOXICITY TESTS, DESCRIBE QUALITY CONTROL (eg. CLAY ADDED VS. METALS CONTENT), PROCESS FLOW DIAGRAM, SPECS FOR SAND/CLAY MIXTURE.

GREDE WILL PROPOSE A NEW UNIT, A STATIONARY MIXING TANK, INSTEAD OF THE CEMENT MIXER.

STATE OF MICHIGAN

COPY

JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING
BOX 30028
LANSING, MI 48909

RONALD O. SKOOG, Director

October 24, 1985

James T. Williams, Vice President
Grede Foundries, Inc.
P.O. Box 26499
Milwaukee, Wisconsin 53226

Re: Grede Foundries
MID 006 131 890

Dear Mr. Williams:

It is my understanding that our meeting scheduled for October 29, 1985, has been changed to November 14, 1985, at 9:00 a.m. This change was necessary as Andrea Stewart, of the Roscommon District Office, was previously scheduled to make a speech to a manufacturing association in her district on that date. We apologize for any inconvenience the change may have caused. If you have any problems with the November 14 meeting, please contact Ms. Stewart at telephone 517-275-5151. The meeting, to be held at your facility, will be to clarify RCRA and Act 64 permit questions. Specific issues that will be addressed are as follows:

1) Are there any other parameters that should be tested for besides lead and cadmium?

2) What study or physical/chemical properties exist that indicate that the 6:1 ratio of clay bonded sand to cupola emission control dust and fly ash is sufficient to effectively tie up the waste? The sand and clay mixture has less than 10% of the methylene blue clay you describe. What study or physical/chemical properties exist that indicates that the amount of clay used is sufficient?

3) What is the frequency of testing for both the sand and clay mixture and testing for attenuation of the materials?

4) The mixing operation should be run on the day of the meeting. The ownership of the truck and modifications needed to the truck system design will be discussed. The discussion will focus on what is needed to meet the description of a totally enclosed facility.

5) Depending on the mixing operation process, it may be necessary to implement a closure/clean up of the hazardous waste management areas along with other contaminated areas if they exist.

6) Other issues as needed.

I look forward to meeting with you, if you have any questions please call me.

Sincerely,

James D. Roberts

James D. Roberts
Environmental Engineer
Technical Services Section Hazardous Waste Division
517-373-2730

cc: K. Burda/Part B File
A. Stewart, Roscommon, HWD
R. Kim, U.S. EPA

5HS-13

OCT 21 1985

Mr. J. T. Williams, Vice President
Grede Foundries, Inc.
Iron Mountain Foundry
P.O. Box 26499
Milwaukee, WI 53226

RE: Grede Foundries
MID 006 131 890

Dear Mr. Williams,

We have reviewed your July 19, 1985 letter requesting an exemption from the requirements of 40 CFR parts 264 and 265 on the basis of your treatment process constituting a "totally enclosed treatment facility."

The treatment unit which you described does not meet the definition of a totally enclosed system. The decision of this agency is based on the following:

> The "screw conveyor discharge filter" does not appear to be made of impermeable materials, and thus does not demonstrate that hazardous waste will be prevented from escaping;
>
> The procedure for disconnecting the discharger does not ensure that hazardous waste would not be released to the environment at this time (i.e. dust which adheres to the discharger may escape after disconnection).

In addition, the definition limits "totally enclosed treatment facilities" to tank-like equipment. Since a tank refers to a stationary device, the treatment vessel is not eligible for an exemption.

Therefore, your facility must comply with the above stated requirements. Also, the financial assurance requirements must be submitted immediately. If you have any questions or need assistance, please call Ms. Randi Kim of my staff, at (312) 886-6151.

Sincerely,

Edith M. Ardiente, P.E.
Chief, Technical Programs Section

cc: Alan J. Howard, MDNR

5HS-13:WMD:SWB:TPS:MI:R.Kim:J.DAVIS:DRAFT:10/09/85:FINAL 10/11/85

	TYP.	AUTH.	IL. CHIEF	IN. CHIEF	MI. CHIEF	MN/WI CHIEF	OH. CHIEF	TPS CHIEF	WMAB CHIEF	WMD DIV.
INIT. DATE	10-11-85	10-15-85			Acting 10-15-85			10/17/85		

EPA

Region II Headquarters
P. O. Box 128
Roscommon, Michigan 48653

August 5, 1985

James T. Williams, Vice-President
Grede Foundries, Inc.
P. O. Box 26499
Milwaukee, WI 53226

MID006131890

Dear Mr. Williams:

On June 20, 1985, acting as a representative of the U.S. Environmental Protection Agency, I met with you to inspect Grede Foundries' facility in Iron Mountain, Michigan. The purpose of this inspection was to determine compliance with the Hazardaous Waste Regulations of Subtitle C of the Federal Resource Conservation and Recovery Act (RCRA) of 1976.

As a result of the inspection, no deficiencies were found in the regulations applicable to treatment of hazardous cupola emissions at the Iron Mountain foundry.

I have received copies of your letters to George Hamper at EPA, dated July 19, 1985, which you petition to exempt the Iron Mountain foundry from treatment status. It is assumed that we will both be notified when EPA acts on your petition. Until then, the foundry will be considered to be in compliance by the Hazardous Waste Division.

Thank you very much for your cooperation during my visit. If you have questions regarding this matter, please contact me at the number below.

Sincerely,

Andrea G. Stewart
Water Quality Specialist
HAZARDOUS WASTE DIVISION
(517) 275-5151

AGS:plc

cc EPA

GREDE FOUNDRIES, INC.

GENERAL OFFICES
P.O. BOX 26499
MILWAUKEE, WISCONSIN 53226-0499
TELEPHONE (414) 257-3600

GRAY IRON
IRON MOUNTAIN FOUNDRY-KINGSFORD, MICHIGAN
ROBERTS FOUNDRY CO., INC.-GREENWOOD, SOUTH CAROLINA
DUCTILE IRON
LIBERTY FOUNDRY-WAUWATOSA, WISCONSIN
REEDSBURG FOUNDRY-REEDSBURG, WISCONSIN
WICHITA FOUNDRY-WICHITA, KANSAS
STEEL
MILWAUKEE STEEL FOUNDRY-MILWAUKEE, WISCONSIN
SPECIAL SERVICES
SHORT RUN SPECIALTY FOUNDRY-MILWAUKEE, WISCONSIN
TOOLING CENTER-MILWAUKEE, WISCONSIN
MIDLAND METAL TREATING-FRANKLIN, WISCONSIN

July 19, 1985

Mr. George Hamper, 5HS-13
United States, EPA, Region V
230 South Dearborn Street
Chicago, Illinois 60606

Dear Mr. Hamper:

Grede Foundries, Inc., Iron Mountain Foundry
EPA ID#MID006131890

We met with Andrea G. Stewart of the Michigan DNR at our Iron Mountain Foundry June 20, 1985 for the purpose of inspecting this plant's method of hazardous waste treatment, reviewing the physical plant in general, and reviewing the compliance manual that we use for guiding us in the control of our treatment process. To our knowledge this inspection went satisfactorily.

Since our visit to your office in Chicago on March 7, 1985, we have been working on the development of a totally enclosed treatment facility that would qualify according to the following definition supplied to us:

> "A totally enclosed treatment facility means a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment during treatment. An example is a pipe in which waste acid is neutralized."

The attached blueprint and photographs or xerox copies of the photographs portray how we use a totally enclosed, inclined, rotating vessel on a truck chassis to treat hazardous cupola emission control dust with other non-hazardous and clay bearing material that effectively attenuates any leaching or discharge of hazardous material into the environment. For quality control purposes, all material quantities are measured carefully by a scale whose dial is visable in the photograph of the truck.

More specifically, the inclined vessel is moved to the hopper that contains the non-hazardous attenuating material. The vessel is then filled with the specific weight of this material and moved to the cupola emission control baghouse. The cupola baghouse screw conveyor discharge filter is then connected to the inclined vessel receiving plate at which time the cupola dust can be loaded into the vessel without fear of discharge to the environment. Then the specified weight of cupola dust is delivered to the rotating, inclined vessel and the veins in the vessel thoroughly mix all material so that the result is a non hazardous waste. The screw conveyor discharge filter is then carefully emptied and disconnected, and the resulting non hazardous material is taken to the landfill for disposal.

On the basis of this carefully developed process that we reviewed with Andrea Stewart, we would like to petition to be exempted from treatment status.

In addition to our discussions on the totally enclosed treatment process, we reviewed again the timeliness of the original submittal dates of the "notification of hazardous waste activity" (EPA 8700-12) and the Part A of the hazardous waste permit application (EPA 3500 - 1 and 3500 - 3). Attached is correspondence that I believe will explain the situation that existed with these two items. If this is not adequately explained, please advise and we will do our best to supply you with any further information that is available.

Our financial people are in the process of clarifying all financial assurance details with Michigan and Federal Authorities. These will be forwarded within a short period of time.

Thank you for your assistance.

Sincerely,

J. T. Williams
Vice President

JTW:cw
cc: Andrea G. Stewart
Michigan Department of Natural Resources

RCRA Inspection Report

EPA Identification Number: MID 006131890

Installation Name: GREDE FOUNDRIES, INC.

Location Address: SOUTH CARPENTER AVE.

City: KINGSFORD State: MI

Date of inspection: 6-20-85 Time of inspection (from) 9:00 AM (to) 11:30 A.M.

Person(s) interviewed	Title	Telephone
JAMES T. WILLIAMS	VICE PRES.	414-257-3600

Inspector(s)	Agency/Title	Telephone
ANDREA STEWART	MDNR WATER	517-275-5151
	QUALITY SPEC.	

Installation Activity (mark only one box)	Inspection Form(s)
[X] Treatment/Storage/Disposal per 40 CFR 265.1 and/or Generation and/or Transportation	A
[ ] Treatment/Storage/Disposal (no generation or Transportation)	A
[ ] Generation and Transportation	B, C
[ ] Generation only	B
[ ] Transportation only	C

rks: This facility is a gray iron foundry generating hazardous cupola emission dust. The dust is hazardous due to high levels of lead and cadmium (mostly car bodies are melted in the cupola). The hazardous dust is collected in hoppers below a Harsell baghouse. Approximately 17 lbs. dust is generated per ton scrap melted. The dust is mixed in a cement mixer truck with nonhazardous claybearing sand obtained from collectors on sand systems. Approximately 6:1 sand/dust ratio is used to achieve nonhazardous levels of lead. The nonhazardous treated sand/dust mixture is sampled approximately monthly and analyzed by CBC Aquasearch (Milwaukee, WI) or RMT Labs (Madison, WI). The hazardous dust is treated daily. Disposal is in a landfill. The facility does not own the truck in which the waste is treated (truck owned by Ed Gauthier and Sons under contract to Grede). The treatment process was observed by MDNR HWD Staff and is considered to be a totally enclosed treatment system. It is recommended that the company be exempted from treatment status. Nonhazardous waste generated at the foundry includes slag, molding sand, dust collector waste, refractory waste, grindings, wood, cardboard, paper, garbage.

INSPECTION FORM A

Section A: SCOPE OF INSPECTION.

1. Interim status standards for treatment storage or disposal of HAZARDOUS WASTES SUBJECT TO 40 CFR 265.1. Complete Inspection Form A sections B, C, D, E, and G.

2. Place an "X" in the box(es) corresponding to the facility's treatment, storage and disposal processes, and generation and/or transportation activity (if any). Complete only the applicable sections and appendixes.

Permit application process(es) (EPA Form 3510-3)			Inspection Form A section(s)
S01	☐	storage in containers	I
S02	☐	storage in tanks	J
T01	☐	treatment in tanks	J
S04	☐	storage in surface impoundment	K,F
T02	☐	treatment in surface impoundment	K,F
D83	☐	disposal in surface impoundment	K,F
S03	☐	storage in waste pile	L
D81	☐	disposal by land application	M,F
D80	☐	disposal in landfill	N,F
T03	☐	treatment by incineration	O/P
T04	☒	treatment in devices other than tanks, surface impoundments, or incinerators	Q

Other activities

GENERATOR	☒	APPENDIX	GN
TRANSPORTER	☐	APPENDIX	TR

3. Indicate any hazardous waste processes, by process code, which have been omitted from Part A of the facility's permit application.

4. Indicate any hazardous waste processes (by process code and line number on EPA Form 3510-3 page 1 of 5) which appear to be eligible for exclusion per 40 CFR 265.1(c). Provide a brief rationale for the possible exclusion.

Section B: GENERAL FACILITY STANDARDS: (Part 265 Subpart B)

	YES	NO	NI*	Remarks
1. Has the Regional Administrator been notified regarding: 265.12				
a. Receipt of hazardous waste from a foreign source?	—	—	✓	
b. Facility expansion?	—	—	✓	
c. Change of owner or operator?	—	—	✓	
2. General Waste Analysis: 265.13				
a. Has the owner or operator obtained a detailed chemical and physical analysis of the waste?	✓	—	—	
b. Does the owner or operator have a detailed waste analysis plan on file at the facility?	✓	—	—	LIST OF SCRAP GOING INTO CUPOLA
c. Does the waste analysis plan specify procedures for inspection and analysis of each movement of hazardous waste from off-site?	—	✓	—	TREATED WASTE SAMPLED APPROX. MONTHLY
3. Security - Do security measures include: (if applicable) 265.14				
a. 24-Hour surveillance? or	✓	—	—	
b. i. Artificial or natural barrier around facility? and	✓	—	—	
ii. Controlled entry?	✓	—	—	
c. Danger sign(s) at entrance?	—	✓	—	
4. Owner or operator inspections: 265.15				
a. Does the owner or operator inspect the facility for malfunctions, deterioration, operator errors, and dischanges of hazardous waste that may affect human health or the environment?	✓	—	—	DAILY INSPECTIONS

*Not Inspected

	YES	NO	NI	Remarks
b. Does the owner or operator have an inspection schedule at the facility?	✓			
c. If so, does the schedule address the inspection of the following items:				
i. monitoring equipment?			✓	
ii. safety and emergency equipment?			✓	
iii. security devices?			✓	
iv. operating and structural equipment (i.e. dikes, pumps, etc.)?			✓	
v. type of problems to be looked for during the inspection (e.g. leaky fitting, defective pump, etc.)?	✓			LEAKS IN BAGS
vi. inspection frequency (based upon the possible deterioration rate of the equipment)?	✓			DAILY
d. Are areas subject to spills inspected daily when in use?	✓			
e. Does the owner or operator maintain an inspection log or summary of owner or operator inspections?	✓			
f. Does the inspection log contain the following information:				
i. the date and time of the inspection?	✓			MONTHLY REPORTS TO AQD
ii. the name of the inspector?	✓			
iii. a notation of the observations made?	✓			
iv. the date and nature of any repairs or remedial actions?	✓			
5. Do personnel training records include: 265.16				
a. Job titles?	✓			
b. Job descriptions?	✓			

	YES	NO	NI	Remarks
c. Description of training?		✓		ON-THE-JOB TRAINING
d. Records of training?			✓	
e. Did facility personnel receive the required training by 5-19-81?	✓			
f. Do new personnel receive required training within six months?	✓			ONGOING TRAINING
g. Do personnel training records indicate that personnel have taken part in an annual review of initital training?				
6. If required, are the following special requirements for ignitable, reactive, or incompatible wastes addressed? 265.17				
a. Special handling?			✓	
b. No smoking signs?			✓	
c. Separation and protection from ignition sources?			✓	

Section C: PREPAREDNESS AND PREVENTION: (Part 265 Subpart C)

	YES	NO	NI	Remarks
1. Maintenance and Operation of Facility: 265.31 Is there any evidence of fire, explosion, or release of hazardous waste or hazardous waste constituent?		✓		
2. If required, does the facility have the following equipment: 265.32				
a. Internal communications or alarm systems?	✓			
b. Telephone or 2-way radios at the scene of operations?	✓			
c. Portable fire extinguishers, fire control, spill control equipment and decontamination equipment?	✓			

Indicate the volume of water and/or foam available for fire control:

PLANT WATER SUPPLIED BY CITY OF KINGSFORD

3. Testing and Maintenance of Emergency Equipment: 265.33				
a. Has the owner or operator established testing and maintenance procedures for emergency equipment?	✓			
b. Is emergency equipment maintained in operable condition?	✓			
4. Has owner or operator provided immediate access to internal alarms? (if needed) 265.34			✓	
5. Is there adequate aisle space for unobstructed movement?	✓			
6. Has the owner or operator attempted to make arrangements with local authorities in case of an emergency at the facility?		✓		WASTE IS NOT LIQUID OR IGNITABLE

Section D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES: (Part 265 Subpart D)

	YES	NO	NI	Remarks
1. Does the Contingency Plan contain the following information: 265.52				
a. The actions facility personnel must take to comply with §265.51 and 265.56 in response to fires, explosions, or any unplanned release of hazardous waste? (If the owner has a Spill Prevention, Control, and Countermeasures (SPCC) Plan, he needs only to amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part (as applicable.)	✓			
b. Arrangements agreed by local police departments, fire departments hospitals, contractors, and State and local emergency response teams to coordinate emergency services pursuant to §265.37?		✓		NOT NECESSARY
c. Names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinators?	✓			ALL HAVE PAGERS 24 HRS.
d. A list of all emergency equipment at the facility which includes the location and physical description of each item on the list and a brief outline of its capabilities?		✓		SHOVEL ONLY NEEDED FOR SPILLS
e. An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary? (This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes?)		✓		NOT NECESSARY
2. Are copies of the Contingency Plan available at the site and local emergency organizations? 265.53	✓			SITE ONLY

	YES	NO	NI	Remarks
3. Emergency Coordinator 265.55				
a. Is the facility Emergency Coordinator identified?	✓			RON OLSON
b. Is coordinator familiar with all aspects of site operation and emergency procedures?	✓			
c. Does the Emergency Coordinator have the authority to carry out the Contingency Plan?	✓			
4. Emergency Procedures 265.56				
If an emergency situation has occurred at this facility, has the Emergency Coordinator followed the emergency procedures listed in 265.56?			✓	NO EMERGENCY TO DATE

Section E: MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING: (Part 265 Subpart E)

	YES	NO	NI	Remarks
** 1. Use of Manifest System 265.71				
a. Does the facility follow the procedures listed in §265.71 for processing each manifest? (Particularly sending a copy of the signed manifest back to the generator within 30 days after delivery.)	—	—	✓	
b. Are records of past shipments retained for 3 years?	—	—	✓	
** 2. Does the owner or operator meet requirements regarding manifest discrepancies? 265.72	—	—	✓	
3. Operating Record 265.73				
a. Does the owner or operator maintain an operating record as required in 265.73?	—	—	✓	
b. Does the operating record contain the following information:				
i. The method(s) and date(s) of each waste's treatment, storage, or disposal as required in 40 CFR Part 265 Appendix I?	—	—	✓	
ii. The location and quantity of each hazardous waste within the facility? (This information should be cross-referenced to specific manifest number, if waste was accompanied by by a manifest.)	—	—	✓	
***iii. A map or diagram of each cell or disposal area				

** Not applicable to owners or operators of on-site facilities that do not receive any waste from off-site sources.

*** only applies to disposal facilities

	YES	NO	NI	Remarks
showing the location and quantity of each hazardous waste? (This information should be cross-referenced to specific manifest number, if waste was accompanied by a manifest.)	—	—	✓	
iv. Records and results of all waste analyses, trial tests, monitoring data, and operator inspections?	✓	—	—	
v. Reports detailing all incidents that required implementation of the Contingency Plan?	—	—	✓	
vi. All closure and post closure costs as applicable?	✓	—	—	
4. Availability of Records 265.74 Are all facility records required under 40 CFR Part 265 available for inspection?	✓	—	—	
.**Unmanifested Waste Reports 265.76				
a. Has the facility accepted any hazardous waste from an off-site generator subject to 40 CFR 262.20 without a manifest or or shipping paper?	—	—	✓	
b. If "a" is yes, provide the identity of the source of the waste and a description of the quantity, type, and date received for each unmanifested hazardous waste shipment.				

** Not applicable to owners or operators of on-site facilities that do not receive any hazardous from off-site sources.

Section F - GROUNDWATER MONITORING (Part 265 Subpart F)

Complete this section for facilities that treat, store, or dispose of hazardous waste in landfills, surface impoundments and/or by land treatment.

	YES	NO	NI	Remarks
1. Has the owner or operator of the facility implemented a groundwater monitoring system? 265.90	___	___	___	_____
If "no", Skip to number 11.				
2. Has the owner or operator of the facility implemented an alternate groundwater monitoring system as described in 265.90(d)?	___	___	___	_____
If "yes", skip to number 12. If "no", continue				
3. Does the groundwater monitoring system meet the following requirements of 265.91:				
a. At least one well installed hydraulically up-gradient from the limit of the waste management area?	___	___	___	_____
Indicate the total number of up-gradient wells.				
b. At least three wells installed hydraulically down-gradient at the limit of the waste management area?	___	___	___	_____
Indicate the total number of downgradient wells.	_____			
c. Are the number, locations, and depths of all wells sufficient to yield groundwater samples that are representative of groundwater under the facility?	___	___	___	_____

Sketch the locations of the wells relative to the waste management area.

	YES	NO	NI	Remarks
d. Are the monitoring wells constructed in accordance with 265.91(c) (e.g. properly cased, screened, etc.)?	___	___	___	_____
4. Has the owner or operator developed a written groundwater sampling and analysis plan that includes procedures and techniques for: 265.92				
a. Sample collection?	___	___	___	_____
b. Sample preservation and shipment?	___	___	___	_____
c. Analytical procedures?	___	___	___	_____
d. Chain of custody control?	___	___	___	_____
5. Does the owner or operator follow his groundwater sampling and analysis plan?	___	___	___	_____
6. Is the groundwater sampling and analysis plan maintained at the facility?	___	___	___	_____
7. Has the owner or operator determined the concentration or value of all the groundwater monitoring parameters of 265.92(b) in accordance with paragraphs c and d of 265.92?	___	___	___	_____

	YES	NO	NI	Remarks
8. Has the owner or operator developed an outline of a comprehensive groundwater quality assesment program that is capable of determining: 262.93				
a. Whether hazardous waste or hazardous waste constituents have entered the groundwater?	___	___	___	_____
b. The rate and extent of migration of hazardous waste or hazardous waste constituents in the groundwater?	___	___	___	_____
c. The concentration of hazardous waste or hazardous waste constituents in the groundwater?	___	___	___	_____
*9. Has the owner or operator performed a statistical analysis of his groundwater monitoring data as required in 265.93(b)?	___	___	X	_____
*10. Was there a statistically significant increase (or pH decrease) detected in any well?	___	___	X	_____
a. If "yes," has the owner or operator responded in accordance with the procedures prescribed in 265.93 paragraphs c through f?	___	___	X	_____
Skip to number 14				
11. Has the owner or operator prepared a written groundwater monitoring waiver demonstration for the facility?	___	___	___	_____
a. Is the waiver demonstration maintained at the facility?	___	___	___	_____
b. Has the waiver demonstration been certified by a qualified geologist or geotechnical engineer?	___	___	___	_____

Note: Inspectors should request a copy of the waiver document.

c. Skip questions 12, 13, and 14.

*These requirements do not take effect until the first 6 months after November 19, 1982. The latest date for compliance with these requirements is May 19, 1983.

	YES	NO	NI	Remarks
12. Has the owner or operator submitted an alternate groundwater monitoring system to the Regional Administrator?	—	—	—	_____
a. Has the plan been certified by a qualified geologist or geotechnical engineer?	—	—	—	_____

Note: If the plan for an alternate groundwater monitoring system was not submitted to the Regional Administrator the inspector should request a copy for review.

13. Does the alternate groundwater monitoring plan address the requirements of 265.90(d)?	—	—	—	_____
14. Does the owner or operator submit reports and maintain records as required in 265.94?	—	—	—	_____

Section G - CLOSURE AND POST CLOSURE (Part 265 Subpart G)

	YES	NO	NI	Remarks
. Closure 265.112				
a. Is the facility closure plan available for inspection?	✓			
b. Does the plan identify:				
i. maximum extent unclosed during facility life?			✓	
ii. maximum hazardous waste inventory?			✓	
iv. estimated year of closure?			✓	
v. schedule of closure activities?	✓			
c. Has closure begun?		✓		
*2. Post-Closure 265.118				
a. Is the post-closure plan available for inspection?				
b. Does this plan contain:				
i. description of groundwater monitoring activities and frequencies?				
ii. description of maintenance activities and frequencies for				
AA. integrity of cap, final cover, or containment structures, where applicable				
BB. facility monitoring equipment				
iii. name, address, and phone number of person or office to contact during post-closure care period?				
c. Has the post-closure period begun?				
d. Is the written post-closure cost estimate available? 265.144				

*plies only to disposal facilities.

Section I - USE AND MANGEMENT OF CONTAINERS (Part 265, Subpart I)

		YES	NO	NI	Remarks
1.	Are containers in good condition? 265.171	___	___	___	_____
2.	Are containers compatible with waste in them? 265.172	___	___	___	_____
3.	Are containers managed to prevent leaks? 265.173	___	___	___	_____
4.	Are containers stored closed?	___	___	___	_____
5.	Are containers inspected weekly for leaks and defects.	___	___	___	_____
6.	Are ignitable and reactive wastes stored at least 15 meters (50 feet) from the facility property line? (Indicate if waste is ignitable or reactive). 265.176	___	___	___	_____
7.	Are incompatible wastes stored in separate containers? (If not, the provisions of 40 CFR 265.17(b) apply). 265.177	___	___	___	_____
8.	Are containers of incompatible waste separated or protected from each other by physical barriers or sufficient distance?	___	___	___	_____

Section J - TANKS (Part 265, Subpart J)

		YES	NO	NI	Remarks
1.	Are tanks used to store only those wastes which will not cause corrosion, leakage or premature failure of the tank? 265.192	___	___	___	_____
2.	Do uncovered tanks have at least 60 cm (2 feet) of freeboard, or dikes or other containment structures?	___	___	___	_____
3.	Do continuous feed systems have a waste-feed cutoff?	___	___	___	_____
4.	Are waste analyses done before the tanks are used to store a substantially different waste than before? 265.193	___	___	___	_____
5.	Are required daily and weekly inspections done? 265.194	___	___	___	_____
6.	Are reactive & ignitable wastes in tanks protected or rendered non-reactive or non-ignitable? 265.198 Indicate if waste is ignitable or reactive. (If waste is rendered non-reactive or non-ignitable, see treatment requirements.)	___	___	___	_____
7.	Are incompatible wastes stored in separate tanks? 265.199 (If not, the provisions of 40 CFR 265.17(b) apply.)	___	___	___	_____

8. Has the owner or operator observed the National Fire Protection Associations buffer zone requirements for tanks containing ignitable or reactive wastes?

Tank capacity: _____gallons

Tank diameter: _____feet

Distance of tank from property line _____ feet

(See table 2 - 1 through 2 - 6 of NFPA's "Flammable and Combustible Liquids Code - 1977" to determine compliance.)

Section K - SURFACE IMPOUNDMENTS (Part 265, Subpart K)

	YES	NO	NI	Remarks
1. Do surface impoundments have at least 60 cm (2 feet) of freeboard? 265.222	___	___	___	_____
2. Do earthen dikes have protective covers? 265.224	___	___	___	_____
3. Are waste analyses done when the impoundment is used to store a substantially different waste than before? 265.225	___	___	___	_____
4. Is the freeboard level inspected at least daily? 265.226	___	___	___	_____
5. Are the dikes inspected weekly for evidence of leaks or deterioration?	___	___	___	_____
6. Are reactive & ignitable wastes rendered non-reactive or non-ignitable before storage in a surface impoundment? (If waste is rendered non-reactive or non-ignitable, see treatment requirements.) 265.229	___	___	___	_____
7. Are incompatible wastes stored in different impoundments? (If not, the provisions of 40 CFR 265.17(b) apply.) 265.230	___	___	___	_____

Section L - WASTE PILES (40 CFR Part 265, Subpart L)

	YES	NO	NI	Remarks
1. Are waste piles covered or protected from dispersal by wind? 265.251	___	___	___	_____
2. Is each in-coming movement of waste analyzed before being added to the waste pile? 265.252	___	___	___	_____
3. Are leachate, run-off, and run-on controlled as per the requirements of 265.253? 265.253	___	___	___	_____
4. Are reactive & ignitable wastes rendered non-reactive or non-ignitable before storage in a pile? Indicate if waste is ignitable or reactive. (If waste is rendered non-reactive or non-ignitable, see treatment requirements.) 265.256	___	___	___	_____
5. Are piles of reactive or ignitable waste protected from materials or conditions that might cause them to ignite or react?	___	___	___	_____
6. Are incompatible wastes stored in different piles? (If not, the provisions of 40 CFR 265.17(b) apply.) 265.257	___	___	___	_____
7. Are piles of incompatible waste protected by barriers or distance from other waste?	___	___	___	_____

Section M - LAND TREATMENT (Part 265, Subpart M)

		YES	NO	NI	Remarks
1.	Is treated hazardous waste capable of biological or chemical degradation? 265.270	___	___	___	_____
2.	Are run-off and run-on diverted from the facility or collected				
3.	Is waste analyzed according to 265.273?	___	___	___	_____
4.	If food chain crops are grown at the facility, has the owner or operator addressed the requirements of 265.276?	___	___	___	_____
5.	Is an unsaturated zone monitoring plan designed and implemented to detect the vertical migration of hazardous waste and provide information on the background concentrations of the hazardous waste available? 265.278	___	___	___	_____
6.	Does the unsaturated zone monitoring plan address the minimum information specified in 265.278?	___	___	___	_____
7.	Are records kept regarding application dates and rates, quantities, and locations, of all hazardous waste placed in the facility? 265.279	___	___	___	_____
8.	Are the special requirements fulfilled regarding land treatment of ignitable or reactive wastes? (Indicate if waste is ignitable or reactive.) 265.281	___	___	___	_____
9.	Are incompatible wastes land treated? (If yes, 265.17(b) applies) 265.282	___	___	___	_____

Section N - LANDFILLS (Part 265, Subpart N)

	YES	NO	NI	Remarks
1. General Operating Requirements 265.302 Does the facility provide the following:				
a. Diversion of run-on away from active portions of the fill?	___	___	___	_____
b. Collection of run-off from active portions of the fill?	___	___	___	_____
c. Is collected run off treated?	___	___	___	_____
d. Control of wind dispersal of hazardous waste?	___	___	___	_____
2. Surveying and Recordkeeping 265.309 Does the Operating Record Include:				
a. A map showing the exact location and dimensions of each cell?	___	___	___	_____
b. The contents of each cell and the location of each hazardous waste type withing each cell?	___	___	___	_____
Special requirements for ignitable or reactive waste. Are ignitable or reactive wastes treated so the resulting mixture is no longer ignitable or reactive? (Indicate if waste is ignitable or reactive.) 265.312	___	___	___	_____
4. Special Requirements for Incompatible Wastes. 265.313 Does the owner or operator dispose of incompatible waste in separate cells? (If not, the provisions of 40 CFR 265.17(b) apply.)	___	___	___	_____

Note: If waste is rendered non-reactive or non-ignitable see treatment requirements. If not, the provisions of 40 CFR 265.17(b) apply.

	YES	NO	NI	Remarks
Special requirements for liquid waste 265.314				
a. Are bulk or non-containerized liquids placed in the landfill? If "yes," complete items i, ii, and iii.				
i. Does the landfill have a chemically and physically resistant liner system?	___	___	___	_____
ii. Does the landfill have a functional leachate collection system?	___	___	___	_____
iii. Are free liquids stabilized prior to or immediately after placement in the landfill?	___	___	___	_____
b. Have containers holding free liquids been placed in landfill since March 22, 1982?	___	___	___	_____
6. Special requirements for Containers 265.315 Are empty containers crushed flat, shredded, or similarly reduced in volume before being buried beneath the surface of the landfill?	___	___	___	_____

Section O/P - INCINERATION AND THERMAL TREATMENT (40 CFR Part 265, Subparts O and P)

Determination of Steady State I=incinerator T=thermal

a. Type of unit (i.e., type of incinerator or thermal treatment): _____

b. Components and steady state condition: I 265.343 T 265.373

Was each component at steady state prior to adding waste?

Component	YES	NO	NI	Remarks

2. Waste Analysis I 265.345 T 265.375

a. Minimum requirements, for wastes not previously burned/treated.

i. Required analyses; has an analysis been performed for the following?

Heating value				
Halogen content				
Sulfur content				

ii. Has documented or written data been substituted for analysis of either:

Lead?				
Mercury:				

b. List other paramters for which the waste is tested to enable owner or operator to establish steady state or determine the types of pollutants which may be emitted. (Note in Remarks any which you feel should be tested.)

	YES	NO	NI	Remarks
3. Monitoring and Inspections I 265.347 T 265.37				
a. Are combustion/emission control instruments monitored at least every 15 minutes?	___	___	___	_____
b. Is steady state maintained or corrections attempted?	___	___	___	_____
c. Is stack plume observed at least hourly for normal color and opacity?	___	___	___	_____
d. Did any stack observations made by owner or operator show a plume different than normal?**	___	___	___	_____
e. If "yes" to (d) above, were corrections made to return emissions to normal appearance?**	___	___	___	_____
f. Are the complete unit and associated equipment inspected daily for leaks, spills, and fugitive emissions?	___	___	___	_____

**Specify in Remarks for what period of time this was checked.

g. Are emergency shutdown controls and system alarms checked daily for proper operation?	___	___	___	_____

4. Open Burning T 265.382 (open burning does not apply to incineration)

a. Only complete this part if the facility open burns hazardous waste.				
i. Does this facility burn only waste explosives? (A No answer means other hazardous waste is open-burned).	___	___	___	_____

	YES	NO	NI	Remarks
ii. It this facility open-burns waste explosives, does it burn the waste at a distance greater than or equal to the minimum specified distance (below)	___	___	___	_____

Pounds of waste explosives or propellants	Minimum distance from open burning or detonation to the property of others	
0 to 100.....	204 m	670 ft
101 to 1,000.....	380 m	1,250 ft
1,001 to 10,000.....	530 m	1,730 ft
10,0001 to 30,000.....	690 m	2,260 ft

Section Q - CHEMICAL, PHYSICAL AND BIOLOGICAL TREATMENT (Part 265, Subpart Q)

		YES	NO	NI	Remarks
1.	Is equipment used to treat only those wastes which will not cause leakage, corrosion, or premature failure? 265.401	✓			
2.	Is a continuously fed system equipped with a means of hazardous waste inflow stoppage or control (e.g., cut-off system)?	✓			SCREW CONVEYOR STOPS BASED ON WEIGHT INTO TRUCK
3.	Has the owner or operator addressed the waste analysis requirements of 265.402?			✓	SAMPLES TAKEN AS WASTE DUMPED FROM TRUCK
4.	Are inspection procedures followed according to 265.403?			✓	
5.	Are the special requirements fulfilled for ignitable or reactive wastes? 265.405			✓	NOT IGNITABLE OR REACTIVE
6.	Are incompatible wastes treated? (If yes, 265.17(b) applies.) 265.406			✓	NOT INCOMPATIBLE

Note: EPA has temporarily suspended the applicability of the requirements of the hazardous waste regulations in 40 CFR Parts 122, 264 and 265 to owners and operators of (1) wastewater treatment tanks that receive, store, and treat wastewaters that are hazardous waste or that generate, store or treat a wastewater treatment sludge which is a hazardous waste where such wastewaters are subject to regulation under Sections 402 or 307(b) of the Clean Water Act (33 U.S.C. 1251 et seq.) and (2) neutralization tanks, transport vehicles, vessels, or containers which neutralize wastes which are hazardous only because they exhibit the corrosivity characteristics under 40 CFR §261.22, or are listed as hazardous wastes in Subpart D of 40 CFR Part 261 only for this reason.

NON HAZARDOUS TREATED WASTE IS DISPOSED OF IN LANDFILL — NO MANIFESTS

Appendix GN

Section A: Scope

1. Complete this Appendix if the owner or operator of a TSD facility also generates hazardous waste that is subsequently shipped off-site for treatment, storage, or disposal.

Section B: MANIFEST REQUIREMENTS (Part 262, Subpart B)

	YES	NO	NI	Remarks
(1) Does the operator have copies of the manifest available for review? 262.40	___	___	___	_____
(2) Examine manifests for shipments in past 6 months. Indicate approximate number of manifested shipments during that period. _____				
(3) Do the manifest forms examined contain the following information: (If possible, make copies of, or record information from, manifest(s) that do not contain the critical elements). 262.21				
a. Manifest document number?	___	___	___	_____
b. Name, mailing address, telephone number, and EPA ID number of Generator	___	___	___	_____
c. Name and EPA ID Number of Transporter(s)?	___	___	___	_____
d. Name, address, and EPA ID Number Designated permitted facility and alternate facility?	___	___	___	_____
e. The description of the waste(s) (DOT shipping name, DOT hazard class, DOT identification number)?	___	___	___	_____
f. The total quantity of waste(s) and the type and number of containers loaded?	___	___	___	_____
g. Required certification?	___	___	___	_____
h. Required signatures?	___	___	___	_____

(4) Reportable exceptions 262.42

a. For manifests examined in (2) (except for shipments within the last 35 days), enter the number of manifests for which the generator has NOT received a signed copy from the designated facility within 35 days of the date of shipment. _____

b. For manifests indicated in (4a), enter the number for which the generator has submitted exception reports (40 CFR 262.42) to the Regional Administrator. _____

Section C: PRE-TRANSPORT REQUIREMENTS (Part 262, Subpart C)

	YES	NO	NI	Remarks
Is waste packaged in accordance with DOT regulations? (Required prior to movement of hazardous waste off-site) 262.30	___	___	___	_____
2. Are waste packages marked and labeled in accordance with DOT regulations concerning hazardous waste materials? (Required for movement of hazardous waste off-site) 262.31 262.32	___	___	___	_____
3. If required, are placards available to transporters of hazardous waste? 262.33	___	___	___	_____

4. On-site accumulation of generated hazardous wastes. A HWMF may accumulate hazardous waste it generates either (A) in its storage facility [265.1(b)] or (B) in accordance with 40 CFR 262.34 [see 265.1(c)(7)]. Option B restricts all accumulation to tanks and containers. If the installation elects option A, check this box ☐ and skip to Section D. If the installation elects option B, complete the following observations: See 40 CFR 262.34 January 11, 1982 Revision

	YES	NO	NI	Remarks
a. Is each container clearly marked with the start of accumulation date?	___	___	___	_____
b. Have more than 90 days elapsed since the date inspected in (a)?	___	___	___	_____
c. Do wastes remain in accumulation tanks for more than 90 days?	___	___	___	_____
d. Is each container and tank labeled or marked clearly with the words "Hazardous Waste"?	___	___	___	_____

Section D: - RECORDKEEPING AND REPORTING (Part 262, Subpart D)

	YES	NO	NI	Remarks
1. Are all test results and analyses needed for hazardous waste determinations retained for at least three years? 262.40	___	___	___	_____

Section E: - INTERNATIONAL SHIPMENTS (Part 262, Subpart E)

	YES	NO	NI	Remarks
1. Has the installation imported or exported Hazardous Waste? 262.50	___	___	___	_____

(If answered Yes, complete the following as applicable.)

a. Exporting Hazardous waste; has a generator:

	YES	NO	NI	Remarks
i. Notified the Administrator in writing?	___	___	___	_____
ii. Obtained the signature of the foreign consignee confiming delivery of the waste(s) in the foreign country?	___	___	___	_____
iii. Met the Manifest requirements?	___	___	___	_____
b. Importing Hazardous Waste; has the generator met the manifest requirements?	___	___	___	_____

Appendix TR

	YES	NO	NI	Remarks
Section A: SCOPE:				
1. Complete this Appendix if the owner or operator transports hazardous waste subject to 40 CFR 263.10.	___	___	___	_____
2. Does the transporter transport hazardous waste into the U.S. from abroad?	___	___	___	_____
3. Does the transporter transport hazardous waste out from the U.S.?	___	___	___	_____
4. Does the transporter mix hazardous waste of different DOT shipping descriptions by placing them into a single container?	___	___	___	_____
Section B: MANIFEST SYSTEM AND RECORDKEEPING (Part 263, Subpart B)				
1. Are copies of completed manifests available for review and retained for three years. 263.22	___	___	___	_____
2. Estimate the number of manifests for shipments completed during the part 6 months.	_____			
3. Examine a representative number of manifests. Indicate number examined.	_____			
4. Did transporter properly sign and date the manifests examined?	___	___	___	_____
5. Do any manifests indicate shipments delivered to other than the designated facility? 263.21	___	___	___	_____
If (5) is "no," skip 6 and 7.	___	___	___	_____
6. Do any manifests indicate shipments delivered to other than an alternate facility?	___	___	___	_____
7. Are shipments delivered to alternate facilities only because emergency prevents delivery to the designated facility?	___	___	___	_____

TRW MIDO06131890

RES 11-06-84 file please

Region II Headquarters
P.O. Box 128
Roscommon, MI 48653
August 7, 1984

James T. Williams
Grede Foundries, Inc.
P.O. Box 26499
Milwaukee, Wisconsin

Dear Mr. Williams:

As per our telephone conversation on July 25, 1984, the Grede Foundry in Kingsford, Michigan, is listed by the Federal Environmental Protection Agency as a hazardous waste treatment, storage, and disposal facility and generator. Such facilities are regulated by the Federal Resource Conservation and Recovery Act of 1976.

We had discussed your mailing me documentaion to show your compliance with the above Act. However, since our Department must conduct a visual inspection of the facility, I will contact you at a later date to meet you at the foundry so I can conduct a thorough inspection.

Very truly yours,

Fred

Fred W. Gottschalk
Water Quality Specialist
HAZARDOUS WASTE DIVISION
517-275-5151

FWG:fas

cc: HWD
EPA
file
c.file

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
GENERAL COUNSEL

MAR 21 1984

MEMORANDUM

SUBJECT: Application of the Definition of "Totally Enclosed Treatment Facility" to Incinerators

FROM: Lisa K. Friedman
Associate General Counsel
Solid Waste & Emergency Response Division (LE-132S)

TO: Robert C. Thompson
Regional Counsel
Region IX

We have received an inquiry from an attorney for the Ashland Chemical Company as to whether or not incinerators can be considered totally enclosed treatment facilities within the meaning of EPA's hazardous waste regulations and thereby be excluded from RCRA Subtitle C requirements. The attorney informed us that the issue has arisen in proceedings in Region IX concerning whether an incinerator at the Ashland Chemical Company in Los Angeles is totally enclosed. We have also discussed the Ashland situation with David Jones of your office. This memorandum is intended to assist the Region in addressing the Ashland facility.

The definition of "totally enclosed treatment facility" appears in §260.10(a) as follows:

> "Totally enclosed treatment facility" means a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which prevents the release of any hazardous waste or any constituent thereof into the environment during treatment. An example is a pipe in which waste acid is neutralized.

It is our view that this language does not include hazardous waste incinerators. Emissions of hazardous constituents (i.e., as byproducts of the combustion process) to the environment are inherent in the normal operation of a hazardous waste incinerator.

Even a highly efficient incinerator will not destroy 100% of all constituents of the hazardous wastes fed to it. The regulatory exclusion of totally enclosed treatment facilities relates only to treatment that prevents releases of both hazardous wastes and their constituents. An enclosed neutralization pipe is an example of such prevention. An incinerator with continuous emissions during operation is not.

On July 28, 1981, the Office of Solid Waste sent a letter to Travenol Laboratories addressing the general scope of the exemption for totally enclosed treatment facilities. (A copy of this letter is attached.) We understand that Ashland contends that this letter supports their position. Ashland is mistaken in this regard. That letter explains that the exemption is limited to operations that prevent any leakage, spills and emissions. For example, the letter calls for covering tanks to prevent gaseous emissions. The letter recognizes that some enclosed tanks incorporate vents and relief values to reduce dangerous pressures from gases that volatilize from liquids held in the tanks. However, that letter did not, and logically could not, extend this limited case to provide an exemption for incinerators that emit combustion gases routinely.

We note finally that Ashland's reading of §260.10(a), if accepted, would exclude a great many (perhaps the majority of) hazardous waste incinerators from the RCRA Subtitle C program. Surely if the Agency had intended such a broad exclusion, it would have stated so explicitly. Yet nowhere in the regulatory definition of totally enclosed treatment facilities, the accompanying preamble, or other Agency documents is such an exclusion mentioned.

We have already informed Ashland of our conclusion that incinerators are not totally enclosed treatment facilities. If you have any further questions in this regard, please call me (FTS 382-7706) or Dov Weitman (FTS 382-7703).

Attachment

cc: John Skinner
David Jones (Region IX)

GREDE FOUNDRIES, INC.

EXECUTIVE
OFFICES

April 5, 1983

Mr. William H. Miner, Chief
Technical, Permits, and Compliance Section
U.S. Environmental Protection Agency
230 South Dearborn Street
Chicago, Illinois 60604

Subject: Grede Foundries, Inc.
EPA I.D. No. MID 006131890

Dear Mr. Miner:

We have received your letter dated 3/31/83 regarding interim status as a treater at our Iron Mountain Foundry.

Attached is a copy of our "NOTIFICATION OF HAZARDOUS WASTE ACTIVITY" indicating we sent this to you on 8/15/80. Attached also is our Part A indicating that we sent this to you on 11/28/80. This was approved through our consultants, Residuals Management Technology, Inc., Madison, Wisconsin.

The problem we faced during the fall of 1980 was that we didn't get the paperwork for Part A. The attached letter from Karl J. Klepitsch, Jr. dated 11/13/80 and received 11/19/80 illustrates how we received an EPA identification number very late, and then it was designated for Illinois instead of Michigan. The Michigan number was not received until 10/2/81. Our handling is explained in my letter to Karl J. Klepitsch dated 10/2/81. Also attached is a copy of our Part A transmittal letter dated 11/28/80 indicating how we had to duplicate forms not yet received in order to file as early as 11/28/80.

P.O. Box 26499 Milwaukee, Wisconsin 53226 (414) 257-3600

In accordance with federal regulations, we are in the process of applying for liability coverage by July 15, 1983. We had expected to provide financial assurance of closure by July 6, 1983, essentially together with the liability coverage, because closure costs are quite low in our case ... roughly $2000-3000. Does your 30-day requirement mean that we must complete these requirements by May 4, 1983?

Your comments would be appreciated.

Sincerely yours,

James T. Williams
Vice President

JTW:ds:T02:1

Attachments

cc: RCRA Activities
P.O. Box A3587
Chicago, IL 60690

William Muno
U.S. - EPA
230 S. Dearborn St.
Chicago, IL 60604

GREDE FOUNDRIES, INC.

EXECUTIVE
OFFICES

October 2, 1981

Mr. Karl J. Klepitsch, Jr., Chief
Waste Management Branch
U.S. Environmental Protection Agency, Region V
230 South Dearborn Street
Chicago, IL 60604

Ok
AB
10-8-81

RE: Our Kingsford, Michigan Foundry

Gentlemen:

In November of 1980, we received an identification number, #ILD006131890. (See attached letter.)

Today, we received a different identification number, #MID006131890. (See attached notice.)

Unless we hear differently from you, we will use the later number, #MID006131890.

Sincerely,

GREDE FOUNDRIES, INC.

James T. Williams
Vice President

Encl.
JTW/mav

P.O. Box 26499 Milwaukee, Wisconsin 53226 (414) 257-3600

EPA

ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

OCT 2

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act *(RCRA)*. Your EPA Identification Number for that installation appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

EPA I.D. NUMBER ➤ • MID006151690 REACKNOWLEDGEMENT

GREDE FOUNDRIES INC IRON
PO BOX 26499
MILWAUKEE WI 53226

INSTALLATION ADDRESS ➤ SC CARPENTER AVE
KINGSFORD MI 49801

REC'D. J.T.W.
OCT 2 1981

A Form 8700-12A (4-80)

RECEIVED
10-8

November 28, 1980

U.S. Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, IL 60604

Gentlemen:

The attached, completed Environmental Protection Agency forms #1 and #3, together with appropriate supporting documents, constitute our application for a permit as an interim status treater of waste.

We would appreciate having this application processed through the normal approval channels. Since we did not want to delay our application longer, we have copied an old duplicate form. Should you have any question regarding the application, or any of the material supplied, please contact me at area 414, 671-2345, extension 261.

Sincerely,

GREDE FOUNDRIES, INC.

James T. Williams
Vice President
Environmental Affairs and
Industrial Engineering

Encl.
mav

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REC'D. U.I.C.

NOV 19 1980

REPLY TO ATTENTION OF:

Date: November 13, 1980

To: RCRA NOTIFIERS

Subject: EPA IDENTIFICATION NUMBERS

It is my understanding that our Headquarters has not sent you an acknowledgement of the notification which you filed with this Agency. By manual search of our Regional files we have retrieved the identification number for your facility located at the address given on your notification. It is shown on the label below:

ILD006131890
IRON MT FDRY GREDE FOUNDRIES INC.
~~GREDE FOUNDRIES INC.~~
50 CARPENTER AVENUE
KINGSFORD, MI 49801

You will receive an official acknowledgement from our Headquarters for your operation at this address in the very near future.

Sincerely,

Karl J. Klepitsch, Jr., Chief
Waste Management Branch

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

FEB 11 1986

OSWER Directive # 9432.00-1

MEMORANDUM

SUBJECT: Totally Enclosed Treatment

FROM: Marcia Williams, Director
Office of Solid Waste (WH-562)

TO: David Stringham, Chief
Solid Waste Branch, Region V
5HS-JCK-13

This is the regulatory clarification you requested on December 30, 1985 for the application of the totally enclosed treatment facility exemption to a tank treating emission control dusts at a scrap metal recycler. The system you describe is not totally enclosed because of the reasons given below.

Your description of the Grede foundry indicates that it heats scrap in a cupola. Emissions from the cupola rise into a hood which is connected to a baghouse via ducts. Ms. Randi Kim of your staff pointed out that hazardous waste is not generated prior to the baghouse unit, and the hood is not directly connected to the cupola. The emission control sludge captured in the baghouse is EP toxic for lead, and possibly chromium, according to Jim Roberts of the Michigan Department of Natural Resources. Grede Foundries proposes to directly connect a mixing tank to the baghouse by pipeline where the dust will be rendered nonhazardous by mixing with nonhazardous foundry waste sands and dusts containing bentonite clay. Since the mixing tank does not exist, we cannot determine whether the tank can technically prevent release of hazardous waste into the environment during treatment through use of traps, recycle lines, etc. Therefore, the central issue you raise is whether the mixing tank can be considered directly connected to the industrial production process, satisfying one condition of a totally enclosed treatment facility as defined in §260.10.

The definition in §260.10 of totally enclosed treatment facilities specifies that the treatment must be directly connected to an industrial production process. In your foundry example,

the cupola is part of the industrial production process, since it produces reusable metal; and the baghouse is part of the waste treatment process, since the sludge is not associated with product or raw materials, i.e., the sludge is disposed of, not recovered for further recycling. Therefore, the treatment that occurs downstream of the baghouse cannot qualify for a totally enclosed treatment exemption, since the cupola is open to the air before the hood collects the dust.

Although our preliminary information indicates that adsorption to clay can be an acceptable treatment method, you should pursue the question of whether the specific clay adsorption process proposed for this facility will provide the effective treatment that would allow it to be permitted as a treatment facility. Carlton Wiles, ORD/Cincinnati, FTS 684-7871, may be able to provide you with further guidance on clay adsoption treatment standards that should be incorporated into the treatment permit to assure effective treatment.

With alternate management practices, the emission control sludge would not be defined as a solid waste, and, therefore, would not be a RCRA hazardous waste. If the fines were returned to the cupola for metal recovery, the entire process would be viewed as closed loop recycling, and the baghouse sludge would not be considered to be a solid waste according to §261.2(e)(1)(iii). If the sludge were reclaimed elsewhere, it also would not be considered to be a solid waste, according to §261.2(c)(3). Sludges being reclaimed are not considered to be solid waste unless specifically listed by EPA, and this particular sludge is not so listed.

Alternatively, the system could be engineered differently. By connecting the hood directly to the cupola, the system could then meet the criteria for being directly connected to an industrial production process. The system may then qualify as a totally enclosed treatment system if the treatment met the technical standards for being closed to the environment.

Since mixing the baghouse dust with bentonite clay as described would require a RCRA permit for treatment, Grede Foundries may wish to pursue one of these other approaches that are not regulated under RCRA. According to data from the 1981 mail survey, many waste streams of K061 and K069 sludge are recycled both on and off site, so Grede may find that recycling is a cost effective management strategy. If you have any questions about this matter, you can contact Irene Horner of my staff at FTS 382-2550.

cc: Solid Waste Branch Chiefs
Regions I-IV and VI-X
Jim Roberts, Michigan DNR

United States Environmental Protection Agency

Office of Solid Waste and Emergency Response

EPA

DIRECTIVE NUMBER:

TITLE: Totally Enclosed Treatment Facilities Exemption for Bag House Sludge

APPROVAL DATE:

EFFECTIVE DATE:

ORIGINATING OFFICE:

☒ **FINAL**

☐ **DRAFT**

STATUS:

REFERENCE (other documents):

OSWER OSWER OSWER

VE DIRECTIVE DIRECTIVE D

United States Environmental Protection Agency
Washington, DC 20460

EPA OSWER Directive Initiation Request

Interim Directive Number: 9432.00-1

Originator Information

Name of Contact Person	Mail Code	Telephone Number
Irene Horner	WH-565 A	382-2550

Lead Office: ☐ OERR ☒ OSW ☐ OUST ☐ OWPE ☐ AA-OSWER

Approved for Review

Signature of Office Director | Date

Title

Totally Enclosed Treatment Facilities Exemption for Bag House Sludge

Summary of Directive

Treatment of EP toxic bag house sludge is not exempted by the totally enclosed treatment facilities exemption. The exemption covers facilities that are directly connected to industrial production processes that do not release hazardous waste to the environment. As the system is currently set up, the bag house is not directly connected to the cupola melting scrap, so it does not meet the direct connection criteria since the bag house is a waste treatment unit. Mixing with bentonite clay would be treatment that needs a permit as currently set up. Reclaiming the EP toxic dust would not be handling a solid waste according to the definition of solid waste, so the company may want to explore that waste management alternative instead.

Type of Directive *(Manual, Policy Directive, Announcement, etc.)*: Memorandum to Region V Solid Waste Branch Chief

Status: ☐ Draft ☒ Final ☒ New ☐ Revision

Does this Directive **Supersede** Previous Directive(s)? ☐ Yes ☒ No Does It Supplement Previous Directive(s)? ☐ Yes ☒ No

If "Yes" to Either Question, What Directive *(number, title)*

Review Plan

☐ AA-OSWER ☐ OERR ☐ OSW ☐ OUST ☐ OWPE ☐ Regions ☐ OECM ☒ OGC ☐ OPPE ☐ Other *(Specify)*

This Request Meets OSWER Directives System Format

Signature of Lead Office Directives Officer | Date

Signature of OSWER Directives Officer | Date